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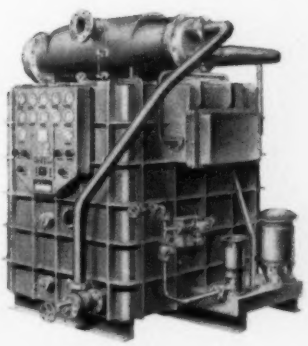

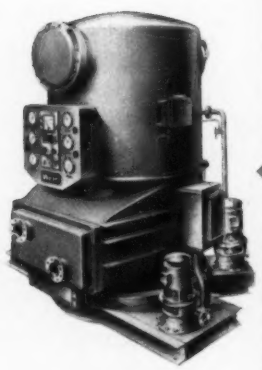

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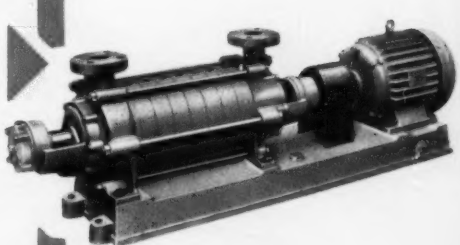

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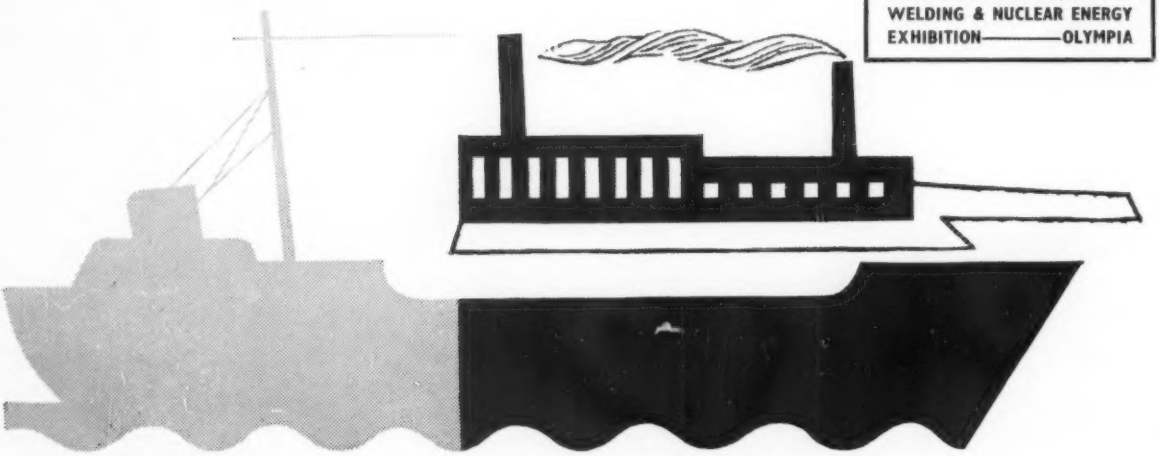

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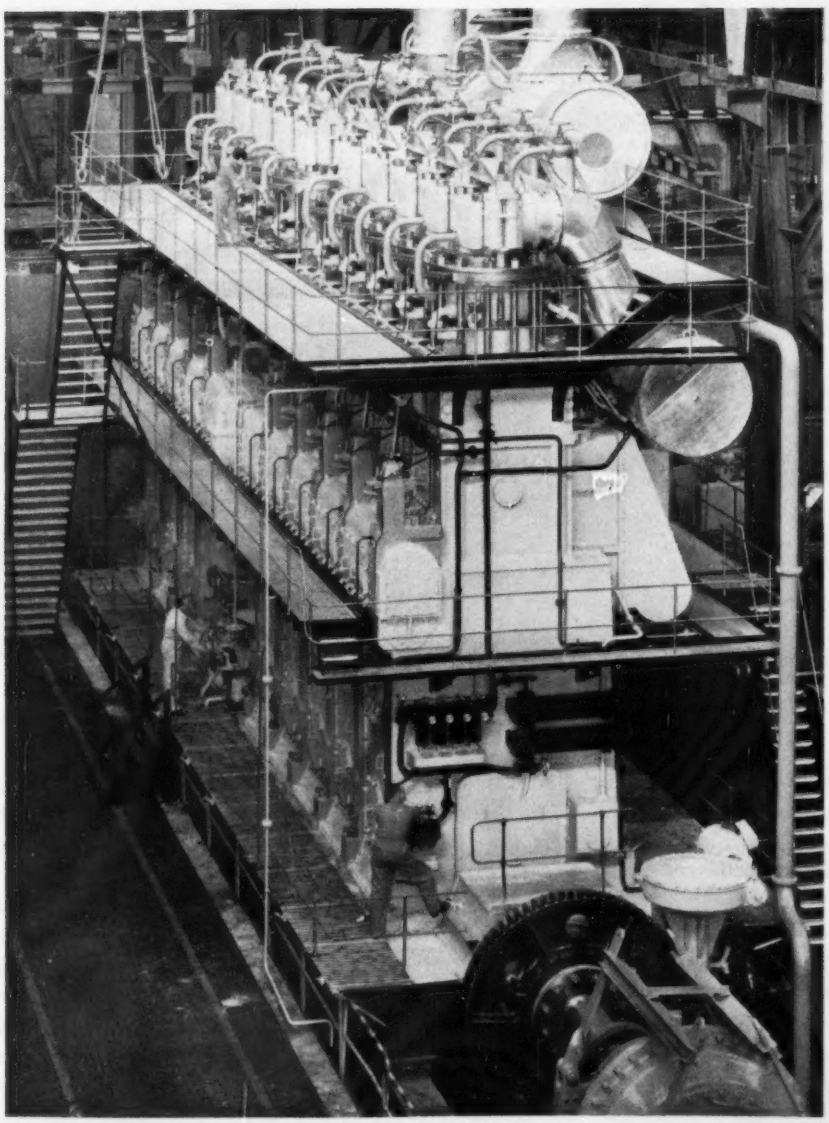

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easily and resists permanent stains. And second, in replacement costs, because Acrilan 15 resists both wear and crushing so magnificently. Carpets of Acrilan 15 are now made by many leading manufacturers in all modern weaves and textures. And they cost no more than traditional carpets of equivalent quality.

If you would like more detailed information about the capabilities of carpet in Acrilan 15, write to Chemstrand Ltd., 8 Waterloo Place, London, S.W.1. for list of manufacturers.

Acrilan – the regd. trade mark for the acrylic fibre supplied by Chemstrand Ltd. Chemstrand makes only the fibre—Britain's finest Carpet Manufacturers do the rest.

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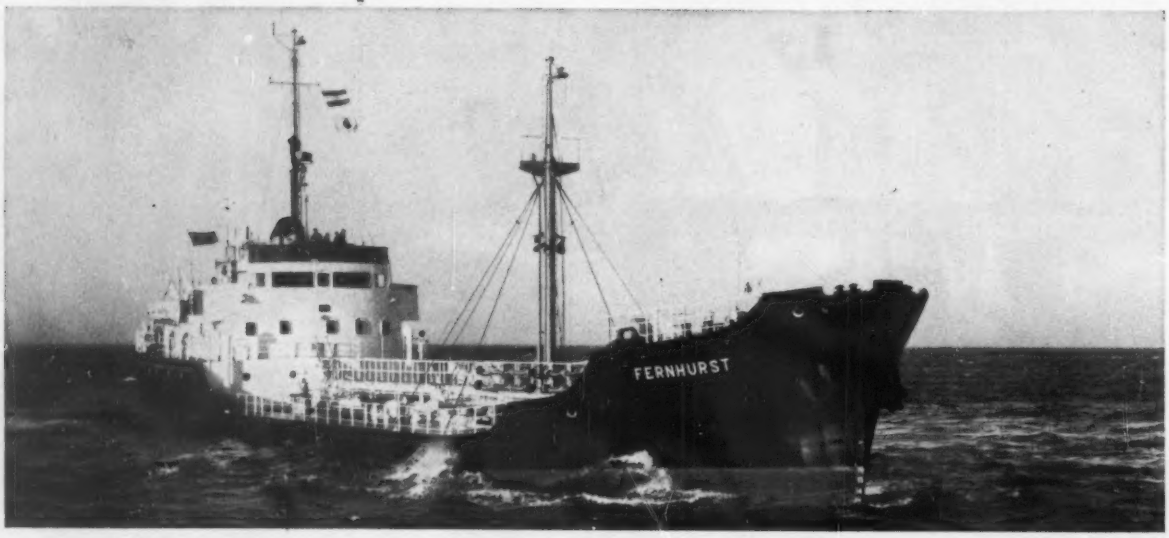

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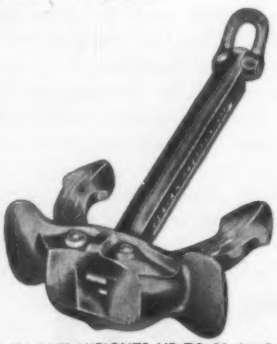

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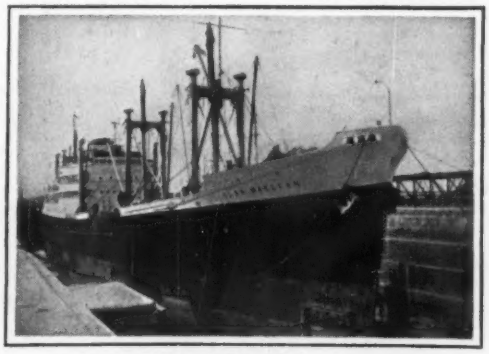

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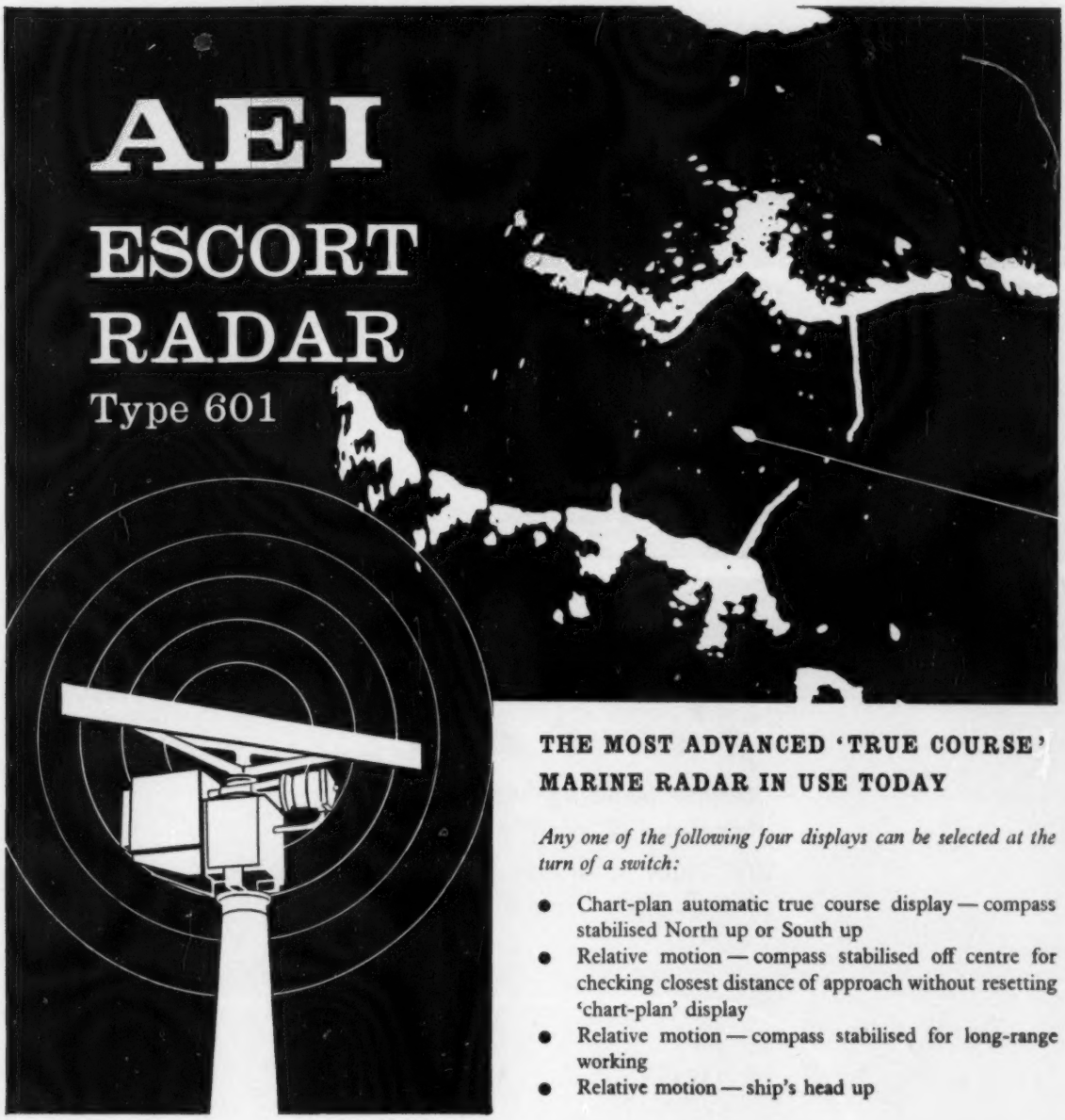

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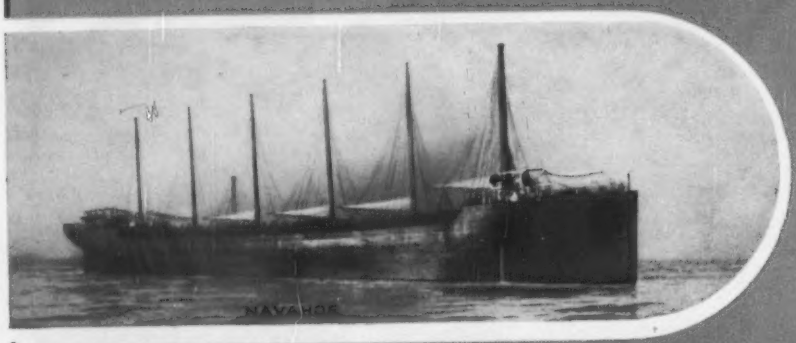

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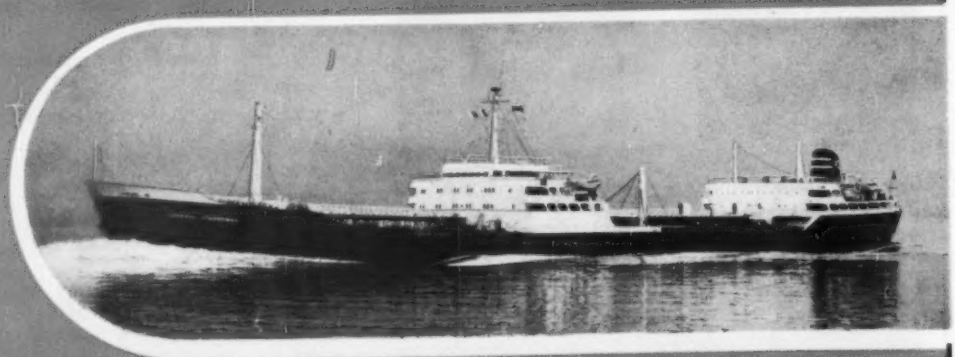

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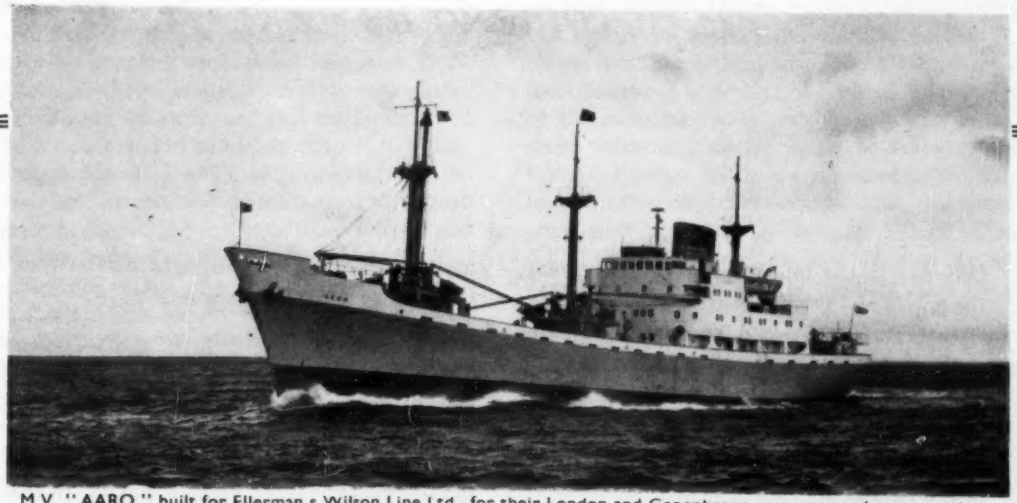

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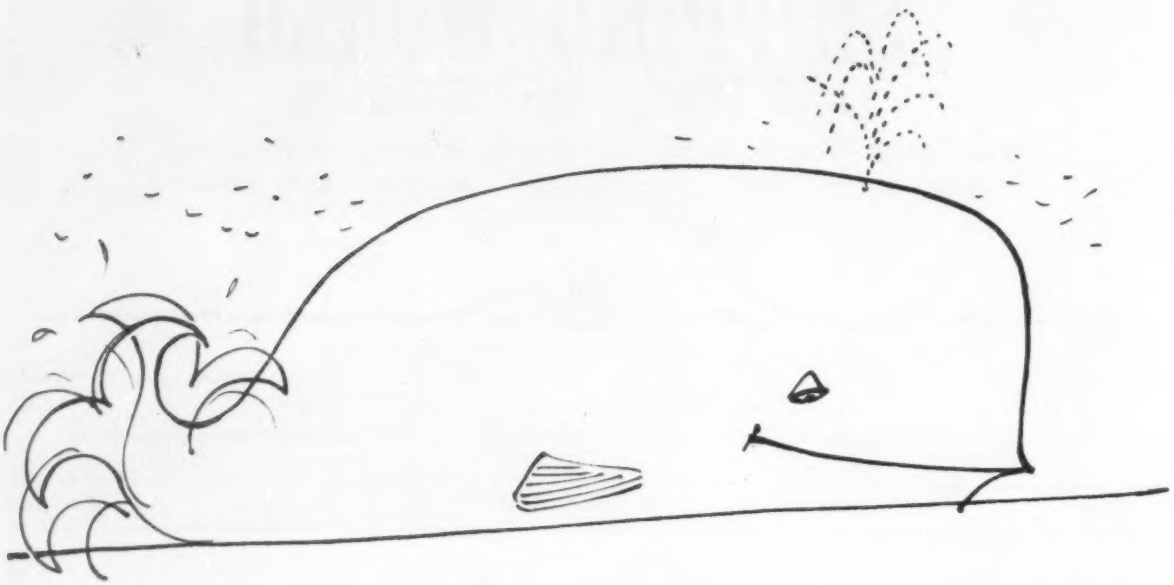

Wise people in whaling come to us

One day in the late autumn of every year, the pop of an invisible starter's pistol echoes silently round the world. Then from countries as far away from each other as Norway and Japan, the whaling fleets slip out in the early morning and steam South. They follow the longitudes, and eventually reach the ice floes of the Antarctic.

These fleets stay out for months at a time, and are quite self-contained. To survive, they need vast quantities of bunker and diesel fuel to propel, heat, warm, light, and to work the factory ships and catchers.

To bunker these fleets, we may send a tanker load to rendezvous at some port halfway round the world. This is bunkering in the grand manner. At the same time, at the other end of the scale, we look after the fishing fleets in more homely waters. In the season, drifters cluster round our fuelling depots like cheerful urchins round an ice-cream kiosk.

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THE SHIPPING WORLD

LONGER CREDIT FOR SHIPBUILDING

For some time now the preponderant factor in deciding where the meagre number of shipbuilding contracts which are under consideration should be placed has been not so much quality, price or speed of delivery as terms of payment. This has been obvious to all concerned in the maritime industries, whether owners or builders, and of whatever nationality. For years the governments of many maritime countries have concerned themselves with supporting their shipbuilding industries by various methods of direct or indirect subsidisation—by the easing of taxation or customs regulations, by direct subsidisation of export quotations, or simply by granting extended credit facilities on favourable terms of interest. In this latter aspect of competition the British shipbuilding industry has been handicapped insofar as the conditions laid down by the Exports Credit Guarantee Department of the Board of Trade have hitherto prevented British shipbuilders from offering to their potential customers the long-term credit facilities that many of their foreign competitors have been able to provide.

For some time the British shipbuilding industry has been deploring the fact that these long-term credit facilities have not been available to them through the normal commercial channels, and that the Government has not been in a position to add its support to underwrite the extra liabilities which are undertaken by the governments of its major competitors. The British Government, of course, subscribes to the principles and precepts of the Berne Convention, which was designed to put some form of agreed restriction on the amount of public funds which should be allowed to be used solely for the purpose of attracting custom for their native industries by means of "bribery" in the matter of terms of payment. The Board of Trade has now apparently decided that in respect of certain industries easier terms of credit guarantee should be made available, with reduced premiums for medium-term credits. It is proposed that export guarantee finance insurance of credit terms can be extended at less cost for periods longer than five years for export projects which exceed £2 mn in cost and export shipbuilding orders which exceed £1 mn in cost.

This revised attitude towards the export potentialities of the shipbuilding industry is welcome, but unfortunately for the industry and the nation as a whole, it has apparently come too late. The few orders that have been in the offing in recent months have already been disposed of. Norwegian shipowners, for example, have recently placed contracts for a total of 16 ships of various sizes with Spanish shipyards, because the Spanish shipbuilding industry has been able to offer much better credit facilities—and also better delivery times because of shorter order books.

"Too little and too late" has been the motto of consecutive British Governments in their half-hearted endeavours to support the maritime industries. It is always welcome to hear that some Government department has made some sort of concession to one or other of the maritime industries, but it would be so much more welcome if action could be taken in time. As Colonel Eustace Smith, the president of the Shipbuilding Conference, commented, "the measures now announced apply only to credit for foreign owners with E.C.G.D. cover" and they do not ease the difficulty experienced by the industry resulting from the prevailing shortage of finance for many British owners, who are, of course, by far the largest prospective customers of the industry. However, half a loaf is better than no bread.

Current Events

Merchant Navy Staff Conference

The first Staff Conference for senior Merchant Navy officers ever to be organised in the United Kingdom is being held this week by the Honourable Company of Master Mariners. Aboard the *Wellington*, the company's headquarters ship, some 40 senior officers—master mariners and chief engineers—will meet daily to listen to lectures and join in discussions on the problems of efficient communication and leadership in the modern Merchant Navy. The participating officers, who have been specially selected for this experimental course, are all serving officers and will represent over 20 British shipping lines. As a Livery Company, the Honourable Company of Master Mariners is of course much concerned to foster a sense of high purpose among those who serve the nation at sea. For some time now the Court have felt that senior officers should be afforded the same facilities as their contemporaries ashore to study and adapt themselves to modern developments in human relationship, staff management and leadership. The relative isolation of the seafarer, both from his peers and from the general and technical press, lends greater urgency to his need for all possible assistance in these matters. Although the present Conference is experi-

mental, it may well be that similar conferences will be run at intervals in the future. The Master of the Company, Captain C. St. G. Glasson, will be chairman of the Conference, and the opening address will be delivered by Viscount Runciman, who has chosen as his subject, "Partnership in a common enterprise". Later in the week Sir Nicholas Cayzer will speak on "Today's and tomorrow's problems for British shipping". Other speakers will include Mr John Marsh, director of the Industrial Welfare Society, Dr Charles Sutton, assistant general manager of the BP Tanker Company, Mr J. E. Genders, personnel manager of Glaxo Laboratories, and Dr Ronald Hope, director of the Seafarers' Education Service.

Trade Union Amalgamation

The amalgamation of the Associated Blacksmiths' Forge and Smithy Workers' Society with the Boilermakers Society, announced at a meeting in Glasgow on April 6, marks a valuable contribution towards unification of trades in the shipbuilding industry on the Clyde. The Associated Blacksmiths' Society was formed in Glasgow over 100 years ago with a current membership in the region of 11,000. They were the only national trade union in the country with headquarters in Scotland and in the present merger they retain autonomy and the right to elect their own officials. Two leading officials have been appointed by the Blacksmiths to the nine-man national executive. They are Mr James Jarvie, who becomes general secretary of the Blacksmiths' section of the Boilermakers' Society, and Mr William Michael, retiring general secretary of the Scottish union. This amalgamation is regarded as an important prelude to further developments, which have been urged and discussed for some considerable period in Glasgow. It is increasingly evident that shipbuilding conditions require reduction in the number of unions involved in the field, with ultimate reduction to one or at most two unions. Given this ideal, spreadover of work would be simplified and the "who-does-what" strikes largely eliminated. Mr James Jarvie, new general secretary of the section, said, "This sets a practical pattern which, in time, could lead to a single powerful union in shipbuilding". The headquarters of the combined unions will be in Newcastle and a name remains to be selected.

Sale of the "New York"

The sale to Japanese shipbreakers for demolition of the Greek Line passenger steamer *New York* (15,991 grt) will mean little to the average person. However, she was in her day quite a famous British passenger steamer. She dates from 1922, when the Fairfield Company (as it was at that time called) built and engined her as the *Tuscania* for the Anchor Line. She started her maiden voyage on 16 September 1922 when she left Glasgow for New York. From 1926 until 1931 she was on charter to Cunard and ran between London, Havre, Southampton and New York. She was sold in 1939 to the General Steam Navigation Co of Greece, and renamed *Nea Hellas*. Between 1941 and 1946 she served as a troopship for the Allies, and reverted to her Greek owners after the war. In 1955 they renamed her *New York*. The ship has been laid up at Kynossoura since November 1959, and has now been sold to a Japanese shipbreaking firm for what is reported to amount to about £312,000, and is to give October delivery in Japan. The price is looked upon as being a very good one, particularly as the delivery is very forward. Bearing in mind that the Japanese shipbreaking industry have already taken two P & O liners, the *Corfu* and *Carthage*, and are showing a lot of interest in the latest P & O ship to become available for disposal —the *Strathaird*—the Japanese obviously see a very great demand for scrap for the rest of the year.

A Distinguished Master

It was with much regret that we heard of the sudden death of Rear Admiral Giles C. Stedman, U.S.N.R.(Ret.), vice-president of the United States Lines, in London on April 10. Admiral Stedman, who was the senior flag officer in the U.S. Naval Reserve at the time of his retirement from the active list in 1959, was born in West Quincy, Mass, in 1897, and had a distinguished career at sea. After service in the U.S. Coast Guard in the first world war, Stedman joined the United States Lines in 1922 and climbed the ladder of promotion until he was appointed commodore in 1940 in the *America*, later converted to the troopship *Westpoint*. The Medal of Valor (American Bureau of Shipping) awarded only three times in the history of the Bureau, was among his many decorations, received mainly for heroism in sea rescues. An award he cherished particularly was a presentation by the British Government of a silver salver given him in 1933 for the outstanding rescue of the crew of the Bristol City Line vessel *Exeter City* after standing by in mountainous seas in his ship the *American Merchant* for nearly five days. The Italian Government also presented him with its Medal of Valour for the rescue of the crew of the *Ignazio Florio* in 1926. The appointment which was to prove the focal point of his naval career came in 1943 when he was named superintendent of the newly formed Merchant Marine Academy at Kings Point, New York. In 1946 Admiral Stedman was released from active service and, in due course, was appointed vice-president and general manager, Pacific services, United States Lines. In 1955 he was made vice-president (foreign offices) with his headquarters in London, and in 1958 he was elected a director of the United States Lines.

The Hague Rules and Cargo Insurance

Mr John Honour's address to the Insurance Institute of London on the effect of the Hague Rules on marine insurance presented an interesting juxtaposition of the benefits of an international convention which has been incorporated in the statue law of many maritime nations to enforce both minimum and maximum standards of liability on ocean carriers towards the cargo carried, with the possible improvement of the risks borne by underwriters under insurance policies. One statement which he did make should be quoted, because while without doubt it has always been tacitly accepted by cargo owners and their underwriters, its significance is often overlooked. Looking at the Hague Rules from the point of view of the cargo owners' insurance policy, Mr Honour pointed out that under bills of lading subject to the Rules, the shipowner was under specific duties with regard to looking after the cargo, and the cargo insurer would in many cases have the right of recovery against a shipowner if the cargo was lost or damaged while in the ship. He added "it is to be assumed, therefore, that the Hague Rules have either enabled cargo insurers to quote lower premiums than they could do if there were no Hague Rules, or at least have enabled them to quote with greater certainty as to the risk." It was almost certain that the speaker would make some reference to the recent decision in the House of Lords in the *Riverstone* case. Unfortunately, in the practical everyday discussion of cargo claims on board ship between shipowners or their protecting and indemnity association and cargo underwriters, this legal case and its possible implications is in danger of being overworked. Undoubtedly, this judgment of the Highest Court is of far-reaching effect

and in his address Mr Honour referred to a suggestion to amend the English Carriage of Goods by Sea Act which has already been made with the object of protecting the shipowner from the type of situation which gave rise to the *Riverstone* case. The alternative suggestion which was offered by the speaker was that shiprepairers should not be permitted to avoid responsibility for negligent workmanship although, perhaps, the practical remedy does not lie in this direction.

Research at Sea

On her latest trip, completed a short while ago, the research trawler *Ernest Holt* had a variety of jobs to perform including one which was outside her normal terms of reference. This was the carrying out of special sea state trials for the British Shipbuilding Research Association. Electronic equipment capable of measuring the sea state, ship stresses, currents, and temperature depth profiles was accommodated in the ship for the trip. Another class of work carried out by the ship is the accurate measurement of ocean currents. For some considerable time it has been realised that ocean currents have an appreciable effect upon the movement of certain types of fish eggs and young fish. It is therefore important for the biologist to understand the structure of these currents. One method used for measuring ocean currents employs a fundamental law of electricity, namely that if a conductor is moved through a magnetic field a voltage is induced in the conductor. In the case of measuring sea currents, the moving salt water mass is the conductor. Since this moves at the velocity of the current through the earth's magnetic field, it induces a voltage which is proportional to the rate of flow of the current. This voltage is detected by means of special electrodes, spaced 200 yards apart and towed behind the *Ernest Holt*. It is then recorded and from previous calibrations the current may be determined. Built in 1948 by Cochrane & Sons, the *Ernest Holt* is owned by the Ministry of Agriculture, Fisheries & Food, and operates in the Arctic. To allow the operation of new electronic equipment capable of precision measurements, she has recently been fitted with a new AC electrical supply system in addition to the ship's DC supply, replacing the earlier AC system. The new generating equipment consists of a Crompton Parkinson 15-kVA motor alternator set embodying a self-regulating alternator which is designed to regulate the alternator frequency within 1 per cent of the nominal frequency of 50 cycles by use of a Brown Boveri frequency regulator. The terminal voltage is constant within ±2 per cent.

Hull War Risks—

The past 18 months have seen changes in the working of the clauses used by the marine insurance markets in Britain and America for the insurance of vessels against war risks. To those shipowners who insure their vessels against war risks in the open market, either in London or New York, these changes must obviously be of considerable importance, and it is essential that the main differences are clearly understood. In the English market the English Institute Clauses issued on 1 October 1959, 1 October 1960 and 1 March 1961 are all available to shipowners as alternative forms of cover. At their option, therefore, they may select conditions which provide for automatic termination of cover on "the outbreak of war or inception of a hostile act, etc, between any members of the North Atlantic Treaty Organisation and any of the signatories to the Warsaw Treaty of 14 May 1955 or the Central People's Government of the People's Republic of China" under the clauses issued 1 October 1959; or, secondly, automatic termination on the outbreak of war, etc, between five named powers, which is the basis of cover under the clauses issued on 1 October 1960 and 1 March 1961. The latter clauses also offer the further variation of either 7 days' or 14 days' voluntary notice of cancellation by underwriter or assured. In addition, each set of clauses presents problems of phraseology and interpretation which require expert opinion and advice. One instance of this kind is the qualification of hostile act which has been introduced into the English clauses of 1 March 1961—"this insurance excludes loss, damage or expense arising . . . (b) from any prior hostile act or acts by any of the above-named countries resulting in such outbreak of war and occurring within a period of 90 days preceding such outbreak of war". The general intention of this qualification can be ascertained after careful study, but it is a matter of opinion whether the words used clearly express this intention.

—and Marine Risks

All shipowners will realise that the underlying concern of all marine insurance markets is to preserve the integrity of insurance funds to permit the full discharge of liabilities assumed under policies of insurance. In the field of war risks the present clauses represent a compromise which has relation to the realities of the need of owners of vessels to shed some part of the risks of hostilities and war risks in peacetime as compared with the essential safeguard of underwriting reserves. In the British market the opinion has been expressed in some quarters that the situation with regard to hull war risks insurance is illogical, because most British vessels are entered in the British War Risks Association and are not placed in the open market on English Institute War Clauses. A large proportion of business done in London is, therefore, from foreign shipowners, who do not have similar facilities in their own countries. In an international market the suggestion is made that a market for hull war risks will attract business on marine risks on hulls which would otherwise go elsewhere.

The research trawler "Ernest Holt", mentioned above

ON THE "BALTIC"

IMPROVEMENT IN RATES TO THE FAR EAST

By BALTRADER

THERE HAVE been too few occasions in recent years when owners have had the pleasure of watching rates rising rapidly, but the past two or three weeks on the outward market have been a notable exception, with charterers apparently feeling obliged to pay up and throw caution to the winds. There is, of course, nothing new about the sight of outward rates to the East improving in the spring and early summer, for owners have to try to secure some compensation for the seasonal lack of return prospects, but the extent of the improvement has been a surprise to everyone. At first scrap charterers, with their active demand from the United States to Japan, led the way, while charterers in other trades felt able to shrug off the steady rise in scrap rates as being a fairly localised phenomenon particularly applicable to early Liberty type vessels, which are always favoured by American scrap operators. However, as week succeeded week and the scrap charterers continued to take up every available vessel at steadily increasing rates and also extended their activities to loading dates as far ahead as July, charterers in other trades were forced to sit up and take notice. Last week, for example, there were sharp rises in rates paid for heavy grain from the U.S. Gulf to Japan, and sugar from Cuba to Ceylon showed a big improvement on previous levels. Even on the River Plate market, where charterers have a reputation for "unflapability", rates were moving up last week with undignified haste, and this was the pattern which was being repeated wherever charterers had cargoes to ship in the general direction of China and Japan.

Lack of Balance

The effect of all this activity has been to leave rates in the East and West respectively more out of balance than we have seen for a long time past. Nevertheless it seems unlikely that this gap will continue to widen indefinitely, for if rates from the East are so poor and rates out to the East are so good, the time is bound to come when it is worth an owner's while to ballast his tonnage from the Far East to pick up return cargoes. In fact, of course, many ships have already done this. If this development continues it should check the rise in outward rates, but at the same time, if there is any sort of a reasonable demand from the North Pacific/Far East/Australia area the charterers on those Eastern markets will find that their supply of tonnage is diminishing as vessels ballast away. This could lead to a firmer tendency in the Far East, and last week charterers were finding owners resisting more strongly in the trans-Pacific trades and higher rates were being offered and paid for both grain and scrap. This resistance was not so much a result of any increase in inquiry but rather reflected the more confident attitude of owners, who felt fortified by the knowledge that in case of need they could ballast out of the area altogether, a move which at the lower outward levels prevailing a week or two before would have been unthinkable.

From the owner's point of view nothing could be better than that this glorious spurt of outward activity should continue unchecked throughout the summer, but past experience has shown that this is unlikely to be the case in fact. It means, of course, that there will be a huge concentration of tonnage in Eastern waters in the midsummer months when inquiry in that part of the world is normally at its lowest ebb, but nevertheless those owners who are fixing out at current levels should arrive there with a reasonable profit in hand which, like the camel's hump, should stand them in good stead if the markets fall away in the months to come. In the meantime the trans-Atlantic grain trades and other markets on this side of the world remain largely unaffected by the current outward activity. Nevertheless, many owners who were firmly resolved not to send their ships East are being tempted away by the high rates and any big expansion in grain demand from North America to Europe is likely to find tonnage in short supply.

The Freight Markets

The very strong outward market was again the main feature of the freight markets last week but there were signs of improvement in the Far East as well. Scrap rates were still moving upwards and fixtures included *Ionian Leader*, 9,500 dwt for cargo, 475,000 cu ft bale, from Baltimore to Japan at $137,500 f.i.o., June 5/25, and the day before a similar size vessel had been fixed for scrap from the U.S. Gulf to Japan at $133,500 f.i.o., May 1/20. Full rates were also paid for grain from the U.S. Gulf to Japan and fixtures included the *Machitis* to Tokyo/Moji range at $11.75 free discharge, May 12/29. Other eastward fixtures included a vessel with sugar from Cuba to Ceylon at 107s 6d f.i.o. with owners' taxes, May 10/31. There were reports that Russian charterers had fixed sugar from Cuba to the Black Sea at the higher rate of 72s 6d f.i.o. with charterers' taxes for April/May and at 70s for June/July.

In the trans-Atlantic grain trades fixtures included *Alexander T. Wood* with heavy grain from the St Lawrence to Poland at $5.15 free discharge for April/May, and the *Yangos* was taken for wheat from Montreal/Sorel/Quebec to Malta at $8.50, April 28/May 13. A tanker, the *North Lord*, was fixed with 18,000 tons of heavy grain from the Great Lakes, completing St Lawrence, to Antwerp, Rotterdam or Amsterdam at $112,625 f.i.o., May 15/27.

High rates were paid from the River Plate to Japan and fixtures included the *Silverisle* with heavy grain from Up River, completing Buenos Aires, to Moji/Yokohama range at 107s 6d free discharge, clause 6 limited to 2,500 tons bagged cargo, May 10/31. On the South African market fixtures included *Marpessa* with bulk maize from Durban to three ports Moji/Yokohama range at 63s free discharge, June 1/26. The Australian market continued quiet but the *World Jonquil* was fixed with wheat from Sydney, N.S.W., to Japan at 46s 6d free discharge, May 18/30. On the North Pacific higher rates were reported paid for scrap to Japan and fixtures included a Lusi vessel from Portland, Oregon, at $78,000 f.i.o. for May. The *Haralampas Hadjipateras*, 9,500 dwt for cargo, 499,000 cu ft bale, was fixed with lumber and general cargo from British Columbia to three ports Tokyo/Hakata range at $80,000 f.i.o., July 15/August 15. There was little to report in the Far East.

Time charter fixtures included *Nicolaos S. Embiricos* (ms), 10,883 dwt, 671,000 cu ft bale, 14/14½ knots on 15/16 tons intermediate fuel oil, at 21s 3d per ton, delivery Japan, redelivery U.K./Continent/Japan, 5 months trading, April 14/24. Also *Filleigh* (ms), 10,030 dwt, 534,000 cu ft bale, 14 knots on 16½ tons diesel oil, at 22s 3d per ton, delivery Liverpool, redelivery U.K./Continent, one Brazilian round voyage, April 15/20.

NEWS FROM OVERSEAS

From THE SHIPPING WORLD'S Own Correspondents

Japanese Building Costs

THE less favourable shipbuilding loan terms for Japanese owners than for foreign firms building ships in Japan are constantly criticised by the former, who claim that this situation greatly weakens their competitive position. But a recent survey by the Ministry of Transportation shows that the prices of vessels built under recent annual Government-sponsored programmes have steadily declined. Diesel dry-cargo liners of 9,500 grt and with a service speed of 18 knots and diesel tankers of 47,000 dwt and a service speed of 16 knots were used as "standard" vessels in the survey. It showed that the price of dry-cargo liners dropped from Yen 136,800 (about £136.8 sterling) per grt in the 14th (1958) programme to Yen 135,300 in the 15th programme and to Yen 126,200 in the 16th programme. In the case of tankers, the figures were Yen 83,000 per grt, Yen 78,000 and Yen 69,000, respectively. The lower prices were negotiated despite increased labour costs and fluctuations in the price of steel. It was stated that labour and indirect costs rose from Yen 351 per hour in the 14th programme to Yen 365 in the 15th programme and to Yen 385 in the 16th programme. The price of steel plates rose from Yen 46,000 in the 14th programme to Yen 48,500 in the 15th programme and fell to Yen 45,000 in the 16th programme. A reduction in the prices of main engines and the dull shipbuilding market were quoted as the main reasons why the lower ship prices were possible.

Norwegian Orders for Spain

A SUBSTANTIAL group of orders has been placed by Norwegian shipowners with a Spanish shipyard, Cia. Euskalduna de Construccion y Reparacion de Buques, of Bilbao and Gijon. The orders, the first ever to be placed by Norwegian owners with a Spanish yard, cover the construction of 16 small cargo vessels. Of these, nine will be "paragraph" vessels with a gross tonnage of 500 tons as open shelterdeckers, but a deadweight tonnage as closed shelterdeckers of 1,900 tons. Five of the remaining vessels will be of 4,000 dwt, and two will be of 5,000 dwt. The total value of the order is about 70 mn Norwegian kroner, and delivery is scheduled to take place over a period of about two years from 1962.

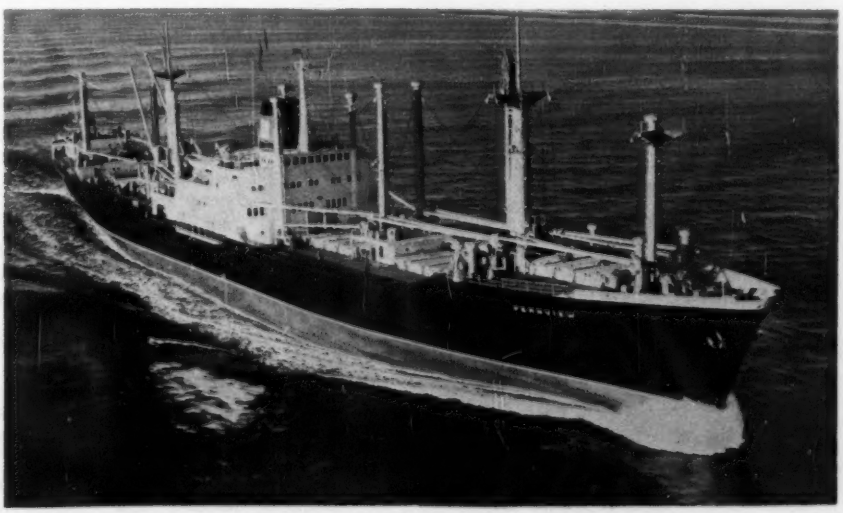
The firm in Norway which acted as principal agent is Ragnar Johansen & Co A/S, Oslo. Mr Johansen said to our correspondent that the work to secure these contracts for the Spanish yard began some time ago. However, good headway was made in January, and although there are still some details left to be settled Mr Johansen was well satisfied with the work already done. He said that the types of vessels had been worked out in close cooperation with Norwegian owners, and the Spanish yard had had the prototypes tank-tested in Madrid. After his recent visit to the yards and other establishments, he expressed his surprise at the excellent facilities offered in Spain. There has been some speculation as to the prices which the Spanish yards have quoted, and Mr Johansen said that vessels of 4,000 dwt will be built at a price between 6.7 and 7.2 mn Norwegian kroner, depending upon the specification from the owners. (This is decidedly less than the price at which the vessels can be built in Northern Europe—about Kr.0.7 mn less.) It is reported in Norway that 75 per cent credit over six years has been given.

Grace Line Replacements

THE Grace Line has announced that on April 13 the keels for three new combined passenger and cargo ships were laid in a triple ceremony at Bethlehem Steel's Sparrows Point Yard in Baltimore. The trio, which represent the first stage in the replacement of the company's present fleet of nine specialised C2 passenger-cargo vessels, will carry 131 passengers each and measure 545ft in length, 79ft in beam and 19,600 tons in displacement. They will be geared turbine steamships with a speed of 20 knots. Grace originally planned them to carry 80 passengers apiece (the C2s carry 55) but have now decided to expand the accommodation by more than one-half. The total cost of this phase of the line's replacement programme is given as $53 mn. The three ships are to enter service in 1962.

Cartels and Conferences

THE existing six Japanese tramp cartels are expected to be strengthened as the result of an agreement for the partial pooling of cargoes and the establishment of a tonnage demand and supply committee. Fifteen cartel lines, headed by N.Y.K., O.S.K. and Mitsui, were listed as members of the Committee. The agreement was to take effect from April 1. It also calls for the establish-



NEW NORWEGIAN CARGO SHIP

The cargo liner "Fernview" has been completed by Gotaverken A/B for Fearnley & Eger, Oslo. Built as a shelterdecker she is 9,000 dwt open and 10,000 dwt closed. The principal particulars are length overall 510ft, breadth moulded 68ft, depth to shelterdeck 41ft and draught open 26ft 9in, and closed 28ft. The main propelling machinery consists of a nine-cylinder Gotaverken diesel engine developing 11,300 bhp at 112 rpm giving a speed of 19¼ knots in the open shelterdeck condition

ment of a mediation committee to arbitrate disputes. The cartels cover coal, iron ore, lumber, non-ferrous metals, grain and salt cargoes.

The Japan-Persian Gulf-Japan Conference and the Bay of Bengal-Japan-Bay of Bengal Conference decided at separate general meetings on March 14 to establish a central booking office in Tokyo to expedite the haulage of heavy cargoes. It is said to be the first time for such an arrangement to be made in Japan. A statement explained that the office would not function as a cargo-pooling centre.

Tokyo Bay Scheme

THE Japanese Ministry of Transportation has inaugurated the first phase of a 10-years Yen234.1 mn scheme for the expansion of Tokyo, Yokohama and Chiba ports into a unified triangular harbour and industrial complex round Tokyo Bay. The plan was recommended by the Ports & Harbours Council, following a request by the Ministry for it to study how best the ports could be further developed. It calls for extensive land reclamation of foreshore areas for industrial and housing sites, the building of new berths and other port facilities, and for the three cities to be linked by new wide highways. Eight new berths are planned for Tokyo, eight for Chiba and 20 for Yokohama. Each of the new Tokyo and Chiba berths would accommodate vessels up to 15,000 tons and at least one of the new Yokohama berths vessels up to 50,000 tons. In the first phase the main part of the work will be concentrated in the improvement of port facilities. A similar scheme has been recommended for the Nagoya-Yokkaichi area.

U.S. Shipyard Reopened

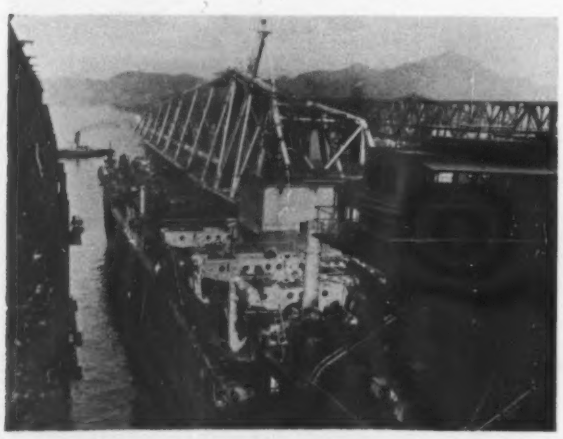
THE Charleston Drydock & Shipbuilding Company, a newly formed corporation, has reopened the shipyard at Charleston formerly operated by Maryland Shipbuilding & Drydock Company's subsidiary, Charleston Drydock Company. This plant is a large shipyard facility, rebuilt during the war from a small shipyard which had existed since the Civil War. The facilities include a 10-acres site on the Cooper River at Charleston with extensive shops, piers and machinery, and a 7,600-tons floating drydock leased from the Navy. Mr W. R. Lovett (chairman of the board) is a prominent financier and industrialist, with varied interests in shipping, banana plantations, real estate, super markets etc. Mr L. Louis Green, Jr (president) has been manager of the plant, with short interruptions, since 1930, and is a naval architect. The new company expects to perform shiprepair work and to enter in addition the field of ship and barge construction, and it expects to open a steel fabrication division.

LARGE DREDGER BUILT IN JAPAN

Second of Two for Venezuela

THE SECOND of the world's two largest dredgers was launched at the Kure shipyard of National Bulk Carriers Inc. on March 4. This vessel, the 16,700-grt dredger *Icoa*, is under construction for Universe Tankships, an affiliate of National Bulk Carriers Inc. Its sister ship is the *Zulia*, which was built at the same yard about a year ago, and was described in this journal at the time (*SW*, 4.5.60). Both are combination hopper and boom discharge-type dredgers, capable of being operated as one type or the other at will, and specially designed for service in Venezuela. Due to be completed about the end of May, the *Icoa* is to go into service under charter to the Orinoco Mining Co. The president of the Orinoco Mining Co, Mr Francis Thomas, and Mrs Thomas attended the launching. Mrs Thomas performed the naming ceremony.

The *Icoa* is to be employed in keeping open the 185-miles channel extending from the sea through the Boca Grande ocean bar and Orinoco river shoals to Puerto Ordaz, in Venezuela. Special features have been incorporated in the design to enable it to carry out this very difficult task. They include a bow propeller fitted in a tunnel, designed to give greater manoeuvrability during operations in the shoals. The dredger also has twin controllable pitch propellers and twin rudders.



The "Icoa" in the building dock at the Kure yard. The discharge pipe boom is prominent

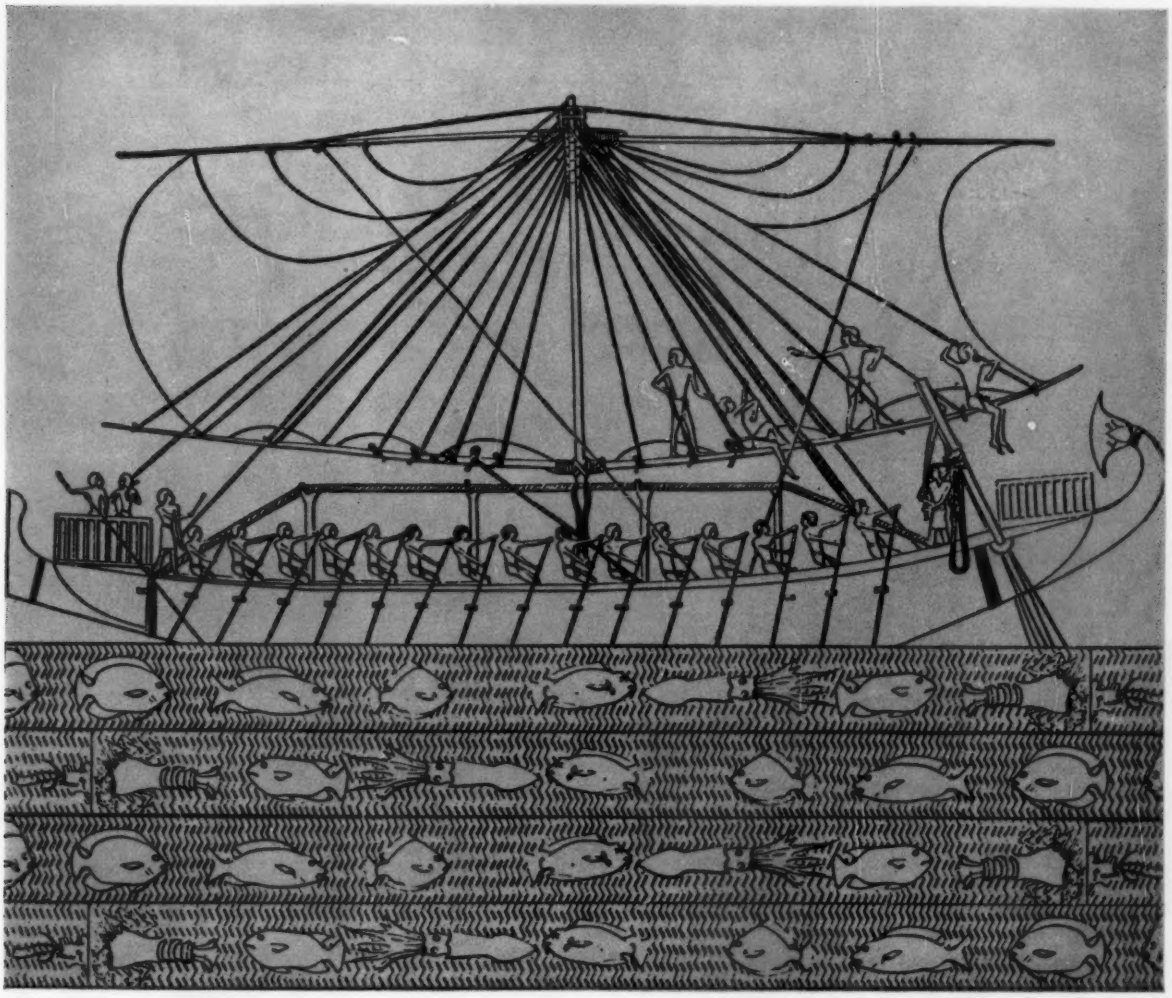
The principal particulars of the *Icoa* are as follows:

Length o.a.	532ft 6in
Length b.p.	490ft
Depth moulded	40ft
Breadth moulded	95ft
Draught (designed)	22ft 6in
Main engines	Two Nordberg diesels delivering a maximum continuous output of 10,500 bhp
Service speed	11 knots at sea 3 knots dredging

The most outstanding external feature of the dredger is the 372-ft discharge pipeline and its supporting steel framework boom, extending aft from amidships. With a diameter of 57in, the pipeline can be swung in an arc of 180 deg across the after section of the dredger. Where conditions permit, the spoil dredged from the bottom is discharged through the pipeline. In other circumstances, the vessel is operated as a hopper dredger. Its hoppers can hold 105,300 cu ft.

The dredging machinery includes four Nordberg diesel engines with normal ratings of 3,420 bhp each, and four sets of dredge suction pumps using four 36-in suction drag arms and having a capacity of 29,200 gallons of silt per minute. The drag arms are designed to permit dredging to a depth of 60ft below the surface of the water, while operating at a draught of 17ft 6in or more. Four Nordberg diesel generators each produce 1,250 kW of AC electrical power.

In a speech at the launching, Elmer L. Hann, general manager of the Kure Shipyards Division of National Bulk Carriers Inc., referred to the difficulties in building such a dredger, and described the vessel as "one of the world's largest earth movers." He said it was capable of moving about 168,000 tons of solids during a 24-hr period. In one hour it could move enough to fill a Liberty ship.



The Conquest of the Sea continues

Primeval man in his hollowed-out tree trunk may be forgiven for having congratulated himself on achieving the ultimate in ship design. The same pride must have recurred during the millennia when oars, sails and propellers replaced the pole and the paddle as means of propulsion. Even today new materials and techniques change the design and performance of ships. Take Marinite. This light, incombustible sheet, used for accommodation structures, has given ships' designers new scope, one instance being the simultaneous sheathing and fire insulation of aluminium in ships' superstructure.

A few statistics—So far, 14 million square feet of British-made Marinite have been delivered for 790 ships. 151 owners satisfied and 114 shipyards supplied.

MARINITE NON COMBUSTIBLE SHEET

THE UNSEEN SAFETY FACTOR. BRITISH MADE

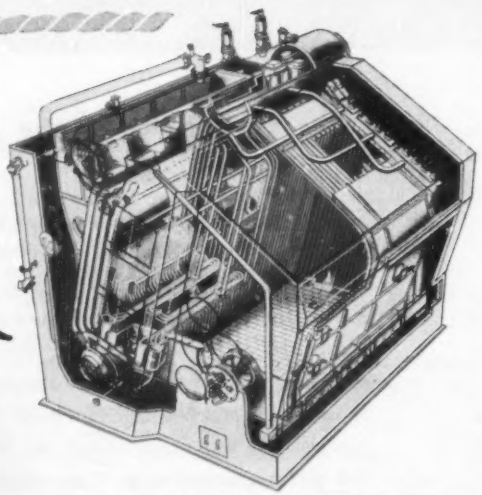
MARINITE LTD., 25-27 NORTH ROW, LONDON W1. TEL: GROSVENOR 5115 FACTORY AT PETERSHILL ROAD, GLASGOW

Babcock Selectable-Superheat boilers again, and this time for the largest tanker built in Britain—the 65,000 d.w. ton tanker "Serenia", launched from the Walker Naval Yard of Vickers-Armstrongs (Shipbuilders) Ltd., for Shell Tankers Ltd.

The main machinery, supplied and fitted by Vickers-Armstrongs (Engineers) Ltd., Barrow-in-Furness, includes two Selectable-Superheat boilers to supply steam for the main turbines, at a pressure of 650 lb./sq.in. and temperatures up to 900 F; and for auxiliary services.

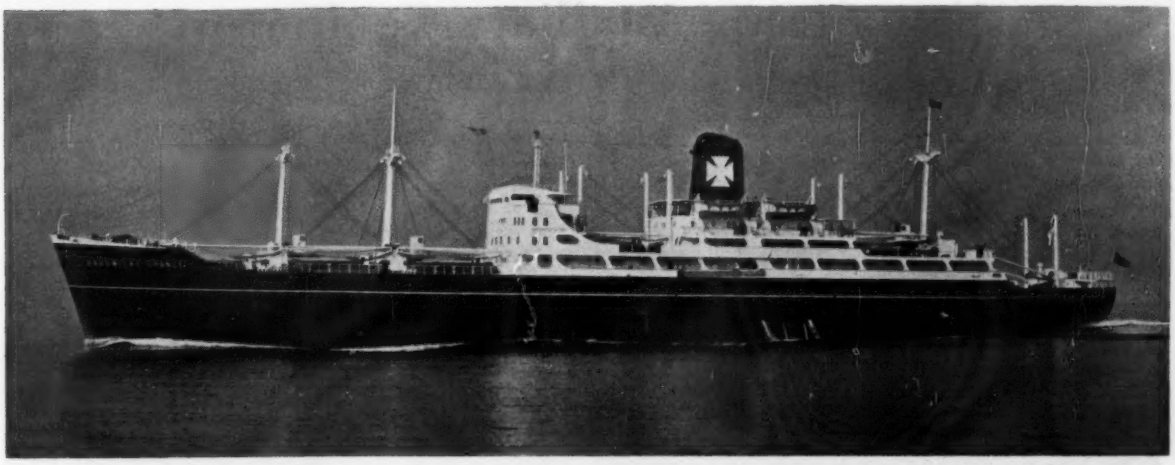
"Serenia" joins an impressive "fleet" of modern merchant and naval vessels equipped with

BABCOCK *Marine* BOILERS



Cut-away view of Selectable-Superheat boiler—a compact single furnace unit providing simple, positive control of steam temperature by a system of differential dampers to adjust gas-flow through the "superheated" and "saturated" sections of the boiler. Well-proved in both naval and merchant service.

BABCOCK & WILCOX LTD., BABCOCK HOUSE, 209 EUSTON ROAD, LONDON, N.W.1



The "Hardwicke Grange"

NEW VESSEL FOR HOULDER LINE LTD

THE LATEST vessel to join the Houlder Line fleet is the *Hardwicke Grange*, a vessel of about 10,330 grt which was completed last month by Hawthorn Leslie (Shipbuilders) Ltd. She follows into service two other vessels built for this line in recent years, the *Denby Grange* (1958) and the *Royston Grange* (1959). Both were built by Hawthorn Leslie. The *Hardwicke Grange* is designed for the United Kingdom-River Plate trade, carrying chilled and frozen meat, and fruit and dairy produce. Accommodation is also provided for 12 passengers.

The principal particulars of the ship are given below:

Length overall	489ft
Length b.p.	460ft
Breadth moulded	65ft 6in
Depth moulded to upper deck ...	27ft 5½in
Depth moulded to shelter deck ...	35ft 3½in
Chilled cargo capacity	435,000 cu ft
Speed in service	16 knots

There are four cargo holds forward of the machinery space and two aft, having six cargo hatchways fitted with MacGregor patent steel covers on both weather and tweendecks, each main cargo hold and tweendeck being divided into three compartments. These compartments are insulated throughout and cooled by the air circulating system of refrigeration. The refrigerating machinery has been supplied by J. & E. Hall Ltd, with air circulating fans by Axia Fans Ltd, electrically driven with AC supply. The insulation work was carried out by the Mersey Insulation Co Ltd, using Fibreglass Crown 125 as the principal insulating medium. Ozone-making apparatus by E.C.D. Ltd is provided in the cargo spaces for use when carrying fruit cargoes.

The vessel is of the closed shelterdeck type, with a plate stem and cruiser stern, cellular double bottom, deep tanks and peak tanks. The double bottom tanks and deep tanks are arranged for the carriage of oil fuel, fresh water, feed water and water ballast. Oil fuel settling tanks are constructed to port and starboard at the forward end of the machinery space abreast the diesel generator space. A simplex balanced type rudder is controlled by a steering gear supplied by Brown Bros. & Co Ltd, of the four-ram electro-hydraulic type with two electrically-driven pumping units and S. G. Brown power unit control gear.

A CO_2 fire extinguishing system, with smoke detection incorporated, supplied by Walter Kidde & Co Ltd, is fitted in all cargo and machinery spaces. An electric windlass, supplied by Emerson Walker Ltd, and eighteen 4-tons winches, and two 6-tons winches with warping ends, all electrically driven, supplied by Clarke, Chapman & Co Ltd, are fitted for handling moorings and use with derricks having lifting capacities of 4 tons and 12½ tons. A sewage system of the ejector type by J. Stone & Co Ltd is fitted for soil disposal, waste water and drainage from accommodation spaces.

The 12 passengers are accommodated on the bridge deck in spacious single and double-berth cabins and the dining saloon is adjacent. A feature of the accommodation is that on the upper deck aft for seamen and engine-room ratings, who are provided with single berth cabins.

Propelling Machinery

The propelling machinery, constructed by Hawthorn Leslie (Engineers) Ltd, consists of a single-screw geared turbine installation developing maximum power of 8,500 shp. Steam is supplied by two water tube boilers at a pressure of 500 lb/sq in and a temperature of 800 deg F.

The HP turbine is of the impulse type and the LP turbine of impulse-reaction type. The gearing is of the double-reduction articulated type, the drive from the turbines being transmitted to the primary gears through flexible couplings, and the drive from the primary gear wheels transmitted in turn to the secondary pinions through quill shafts and flexible couplings. The astern turbines, of the impulse type, develop 65 per cent of the service ahead power. The HP astern turbine is arranged at the forward end of the HP ahead turbine and the LP astern turbine is incorporated in the LP ahead turbine casing.

The two boilers are of the Foster Wheeler E.S.D. type with superheaters, economisers, air heaters and forced draught fans capable of supplying a total of 78,000 lb of steam per hour. A desuperheater of the coil type is fitted to each boiler capable of desuperheating 10,500 lb of steam per hour for various auxiliary services. Automatic combustion control is provided.

The electric generating plant comprises four 500-kW diesel-driven generators supplying direct current at 220 volts for all electrically driven auxiliaries, refrigeration plant, ship services etc. All the main auxiliaries, except the turbine driven main feed pumps, are electrically driven.

New Steam Auxiliary Equipment

EXHIBITS ON THE G. & J. WEIR STAND AT OLYMPIA

Among the many varied exhibits at this year's Engineering and Marine Exhibition at Olympia, the Scottish firm of G. & J. Weir Ltd can claim to have at least three completely new products of marine interest on view. These units, which consist of a two-stage flash evaporator, a submerged-tube type evaporator and a high vacuum exhaust steam turbine, will be seen on Stand No 2, Row F, in the Grand Hall, when the exhibition opens tomorrow. There will also be one of the products of a G. & J. Weir subsidiary, the County Water Softener Co Ltd, which is an extremely novel apparatus for emergency production of fresh water from the sea for use in ships' lifeboats.

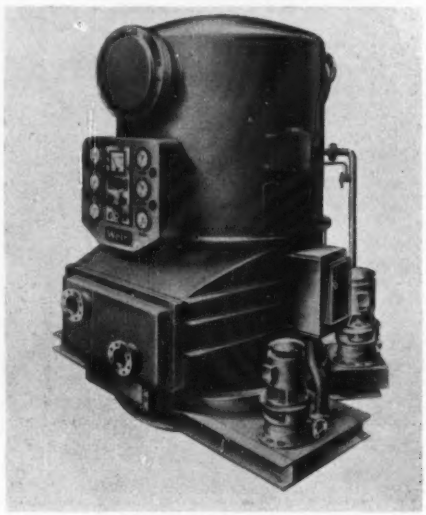
The Weir "F.1" two-stage flash evaporator is the 20-tons/24 hours version of a new range of highly efficient marine evaporators having outputs of 20, 30, 40, 50 and 75 tons/24 hours. It is a compact unit, incorporating a distilling condenser, external feed heater, brine and distillate pumps and steam jet air ejector. Employing the once-through principle of brine circulation, it also incorporates demister screens of finely-knitted Monel metal wire to prevent carry-over of water droplets with the vapour. These units are also suitable for land installations.

Evaporator for Motor Vessels

The Weir "D.1" marine evaporator is another new unit, of the submerged-tube type, designed expressly for use in motor vessels, employing main engine-cooling water as the heating medium. It is of vertical cylindrical design and is supplied complete with brine and distilled water pumps, air extraction pump and distilling condenser. This unit also employs Monel metal wire demister screens, and full instrumentation is provided. The D.1 is made in six standard sizes giving outputs of 5, 10, 15, 20, 25 and 30 tons/24 hours.

Yet another new feature is the Weir high-vacuum exhaust steam turbine. This latest addition to the Weir range of auxiliary turbines is intended primarily for use in diesel ships where high-pressure steam is not available. The turbine is a horizontal, geared type simple impulse unit having one pressure and two velocity stages, and has been designed for steam supplies up to 250 lb/sq in and 750 deg F, developing a maximum of 650 bhp at the shaft extension. Having an infinitely variable shaft speed, up to a maximum of 1,200 rpm, it is an ideal prime mover for cargo oil pumps.

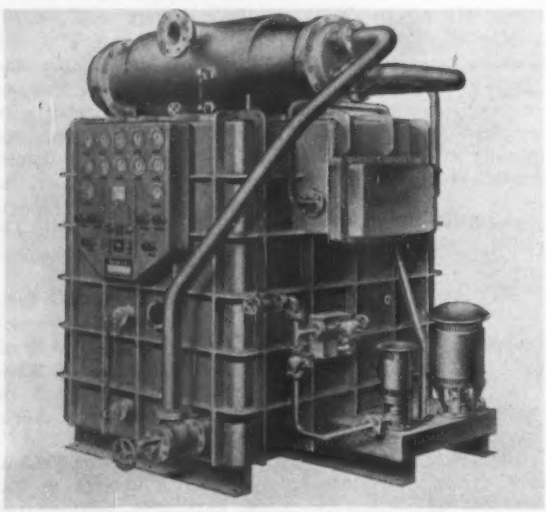
Also to be shown is the "E.F.2" multi-stage Electro-feeder. This is one of a new range of multi-stage electrically-driven centrifugal pumps for smaller land boiler feed duties. They are capable of handling from 1,000 to 2,500 gph, with maximum discharge pressures of 330 to 280 lb/sq in at these loads. They are also available as marine pumps, for capacities of 3,000 gph, and pressures up to 280 lb/sq in operating on a 60 cycle electrical supply. The "E.F.2" can be supplied with up to ten stages, although standard sizes have 5, 6, 7 or 8 stages.



The "D.1" evaporator for motor vessels

Other well-established Weir products on display will include: The highly successful Weir two-element "Robot" boiler feed regulator which was introduced at the 1959 exhibition, together with an illuminated panel which demonstrates the function of the regulator under various boiler conditions; and the Weir "W.L." turbo-pump unit, the glandless high-speed marine boiler feed pump which dispenses with oil lubrication.

A development of the County Water Softener Co. is a novel apparatus for emergency production of fresh water from the sea in ships' lifeboats. This device operates on the electro-dialysis principle and is worked by two persons turning handles at each side of the casing. Electricity is generated for the electro-dialysis process and is also used to work a radio transmitter which automatically sends an S.O.S. signal. The apparatus produces about two gallons of fresh water per hour.



The new Weir "F.1" two-stage flash evaporation and distillation plant

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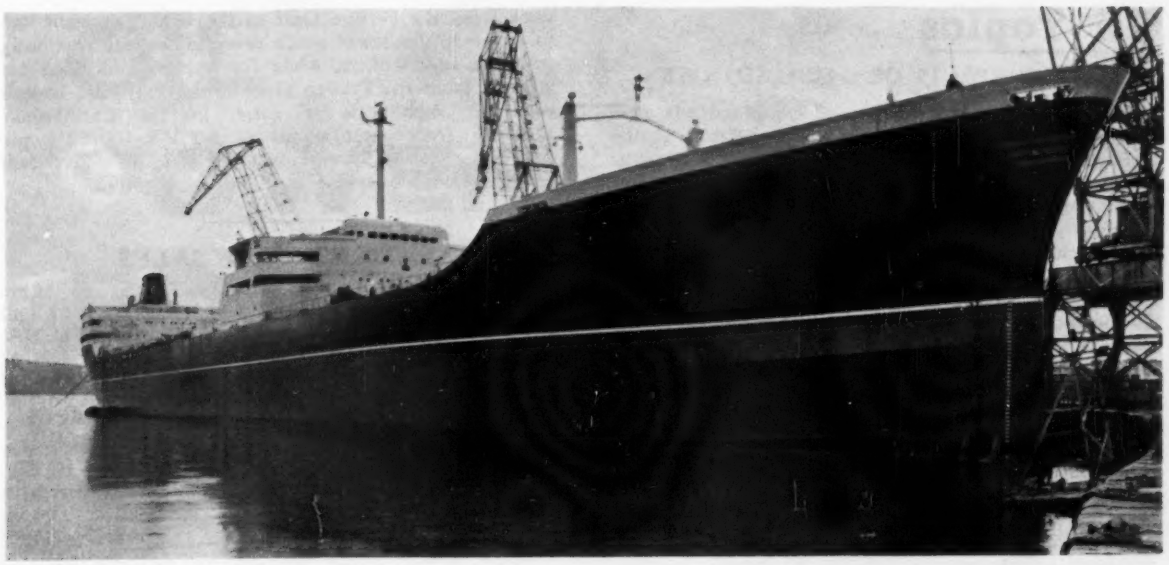
A British company has been formed by Chrysler International to expand marketing of its Airtemp refrigeration, air-conditioning and heating equipment and of Chrysler marine and industrial engines. Chrysler Airtemp Ltd is to operate from the Kew, Surrey, factory where Dodge Brothers (Britain) Ltd manufactures British Dodge trucks and where Chrysler Motor Ltd has its spares and service depot.



The "Amelia Grimaldi"

NEW ITALIAN-BUILT OIL TANKER

THE Italian shipowners Sicula Oceanica S.p.A. have recently taken delivery of an oil tanker of 48,517 dwt from the San Marco-Trieste shipyard of Cantieri Riuniti dell'Adriatico. This vessel, the *Amelia Grimaldi,* is powered by steam turbine machinery. She is of typical Italian design, and is understood to be on charter to the Esso Petroleum Co Ltd. Sicula Oceanica have three passenger liners on regular service from Western Italy, Sicily, and Northern Europe to Venezuela, Central and North America. In addition to the new tanker the company has a smaller American-built turbo-electric tanker in service.

The principal particulars of the *Amelia Grimaldi* are as follows:

Length o.a.	744ft 6in
Length b.p.	705ft 3in
Breadth, moulded	101ft 7in
Depth	49ft 10in
Draught	37ft 9¾in
Deadweight	48.517 tons
Gross tonnage	29.000 tons
Machinery output	17.300 hp
Speed loaded	16.6 knots

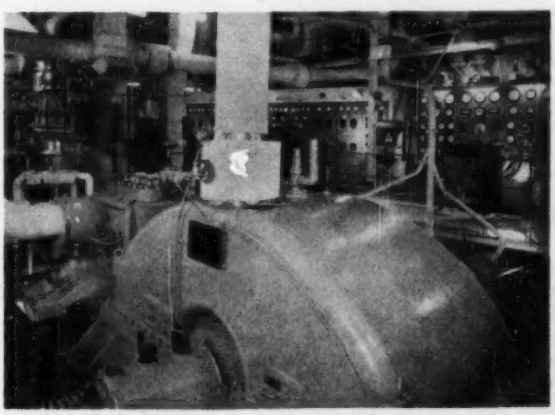
The *Amelia Grimaldi* is mainly of welded construction, and much of the hull is of prefabricated construction, some of the sections weighing up to 40 tons. There are 11 main cargo tanks separated by two longitudinal bulkheads, making 33 tanks in all. Foster type heating coils are used throughout the tanks. Steam smothering and CO_2 firefighting equipment is installed on board.

There are five steam turbine-driven cargo pumps, each of about 1,340 tons/hour capacity, enabling the ship to be completely discharged in a little less than eight hours. The five main collectors are of 400-mm diameter. Two 320 tons/hour capacity duplex steam reciprocating pumps are used for stripping the cargo tanks. There is also a ballast pump of about 1,000 tons/hour capacity.

The accommodation in the ship for officers and crew is of a very high standard, with large cabins and attractive furnishing. Extensive use has been made of laminated plastics for panelling and mosaic tiling for the floors. The crew in particular have excellent messrooms and recreation rooms, and provision has been made for showing cinema films.

The propelling machinery consists of a set of CRDA-de Laval steam turbines having a normal output of 17,300 hp at 102 rpm, and a maximum continuous output of 19,000 hp. The HP and LP turbines are of the reaction type, and at normal output their speeds are respectively 5,476 and 3,192 rpm. The astern turbine is incorporated in the exhaust side of the LP turbine. In order to achieve as low a fuel consumption as possible it was decided to operate these turbines with steam conditions of 896 deg F and 640 lb/sq in at the superheater outlet. The reduction gearing is of the conventional articulated type.

Steam is generated in two CRDA-Foster Wheeler type boilers each of 32 tons/hour evaporation. Desuperheaters enable steam to be supplied for the cargo pump turbines at a temperature of not more than 599 deg F. The main condenser, which is of the regenerative type, has a cooling surface of about 18,000 sq ft.

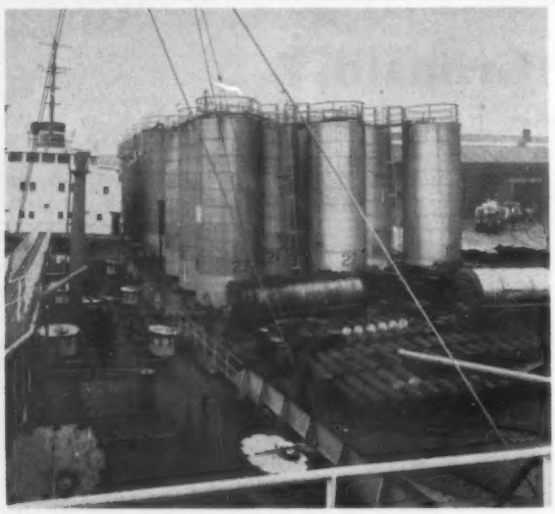


The main CRDA-de Laval steam turbine machinery has a normal output of 17,300 hp

Oil Topics

BULK SHIPMENTS OF SPECIALISED OILS

NEARLY 2,500 tons of a number of specialised oils were pumped into two ships berthed simultaneously at the Trafalgar Dock, Liverpool, oil installation of A. S. Jones Ltd recently. It was the first time that two ships had loaded together at the berth since the installation was built four years ago, and indicates the growing bulk traffic in this field. The 1,800-tons German tanker *Hinrich*, on charter to Canadian interests, loaded 1,750 tons in just over 11 hours. The cargo included 700 tons of maize oil, 400 tons of palm kernel oil, 350 tons of cresylic acid, and 300 tons of ground nut oil. The maize oil and cresylic acid were pumped from several of the dockside storage tanks, while the ground nut oil was pumped into the ship direct from A. S. Jones road tank vehicles and the palm kernel oil from barges moored alongside the vessel. The second ship, the *Lind*, took on 700 tons of liquid chemicals bound for New Jersey, the largest bulk consignment of the fluid to pass through the installation. The



The "Hinrich" alongside the installation

export of liquid chemicals to the United States is expanding, and by bulk shipment it is possible to compete in price with American companies in their own country. The oil installation at Trafalgar Dock was established in 1957 with five general purpose oil tanks, and has expanded so quickly that today there are 14 tanks of 200 tons water capacity and nine tanks of 70 tons. Three more, to hold 250 tons each, are under construction and it is hoped that they will come into use within the next three months. A. S. Jones Ltd is an associated company of Coast Lines Ltd.

Poor Tanker Prospects

AT PRESENT the outlook in the tanker market can only be described as poor, and there is a clear possibility of a summer period worse than those of the past few years. E. A. Gibson & Co Ltd report that there are numerous vessels available in all the main loading areas with little prospects at the moment of a sufficient volume of business to accommodate them. Inquiries for Persian Gulf liftings have been intermittent and more or less limited to trading to the Far East, while demand from the Caribbeans has been slow to develop. The only fixture reported last week from the Persian Gulf to the U.K./Continent was for a handy size vessel which accepted the rate previously paid for supertankers, while for fixtures concluded for voyages from the Persian Gulf to the Far East, owners conceded slightly lower rates. In the Caribbeans/U.S.N.H. trade rates stands at A.T.R.S.—60/62½ per cent for handy sizes and A.T.R.S.—65 per cent for the larger vessels depending on position.

RECENT SHIP SALES

CARGO STEAMERS *Clan Mackellar* (ex-*Empire Lankester*, 10,200 dwt, 7,051 grt, 4,498 nrt, built 1944 by Wm. Gray & Co Ltd) and *Clan Mackinnon* (ex-*Empire Dunnet*, 10,100 dwt, 7,372 grt, 4,611 nrt, built 1945 by Wm. Gray & Co Ltd) sold by Clan Line Steamers Ltd and Houston Line Ltd to Mullion & Co Ltd, Hong Kong, and renamed *Ardgroom* and *Ardross* respectively.

Passenger steamer *New York* (ex-*Nea Hellas*, ex-*Tuscania*, 16,991 grt, 10,016 nrt, built 1922 by Fairfield S.B. & Eng. Co) sold by General Steam Navigation Co Ltd of Greece to Japanese shipbreakers for £312,000 with delivery Japan, October.

Paddle steamer *Jupiter* (642 grt, 233 nrt, built 1937 by Fairfield S.B. & E. Co Ltd) sold by Caledonian Steam Packet Co Ltd to Hammond Lane Metal Co for demolition at Dublin.

Cargo steamer *Lissekerk* (ex-*Simon Stevin*, ex-*Rheinhold Richter*, 10,432 dwt, 7,219 grt, 4,462 nrt, built Richmond Cal, 1943 by Permanente Metals (Shipyard No 1) sold by Vereenigde Nederlandsche Scheepvaart Mij., to Greek buyers for £100,000.

Cargo steamer *Stanthorpe* (ex-*Navarino*, ex-*Silver Wake*, ex-*London Builder*, ex-*Castle Hill*, ex-*Lulworth Hill*, ex-*Empire Mandarin*, 10,275 dwt, 7,033 grt, 4,205 nrt, built Newcastle 1944 by the Shipbuilding Corporation) sold by Stanhope S.S. Co Ltd to Mullion & Co Ltd and to be renamed *Ardbrae*.

Motor vessel *Urmajo* (ex-*Egina*, 840 dwt, 500 grt, 345 nrt, built Rotterdam 1949 by Zaanlandsche Schps. Mij.) sold by H. K. Van der Meer, Kustvaartreederei, Rotterdam, to French buyers.

Motor tanker *Atlantic Duchess* (12,910 dwt, 8,631 grt, 5,077 nrt, built 1950 by Wm. Gray & Co Ltd) sold by Atlantic Tankers Inc., Monrovia, to Jugoslavenska Tankerska Plovidba and renamed *Molat*.

Cargo steamer *Springwater* (ex-*Saint Marcouf*, ex-*John Robert Gordon*, 10,456 dwt, 7,261 grt, 4,363 nrt, built Portland, Me., 1945 by the New England Shipbuilding Corp.) sold by International Navigation Corp., Monrovia, to the Seacrest Shipping Corp., Monrovia, and renamed *Seacrest*.

Cargo steamer *City of Edinburgh* (9,204 grt, 5,025 nrt, built 1938 by Cammell Laird & Co Ltd) sold by Ellerman Lines Ltd to Hong Kong Salvage & Towage Co Ltd for over £125,000 and to be renamed *Castle Mount*. She is giving delivery London and will be broken up at Hong Kong after making the voyage out. A previous sale to Hong Kong trading buyers (*SW*, 22.3.61) failed to materialise.

Cargo steamer *Palamcetto* (9,650 grt, 6,662 grt, 3,822 nrt, built 1945 by Lithgows Ltd) sold by British India S.N. Co Ltd to Hong Kong trading buyers for £92,500 with July delivery.

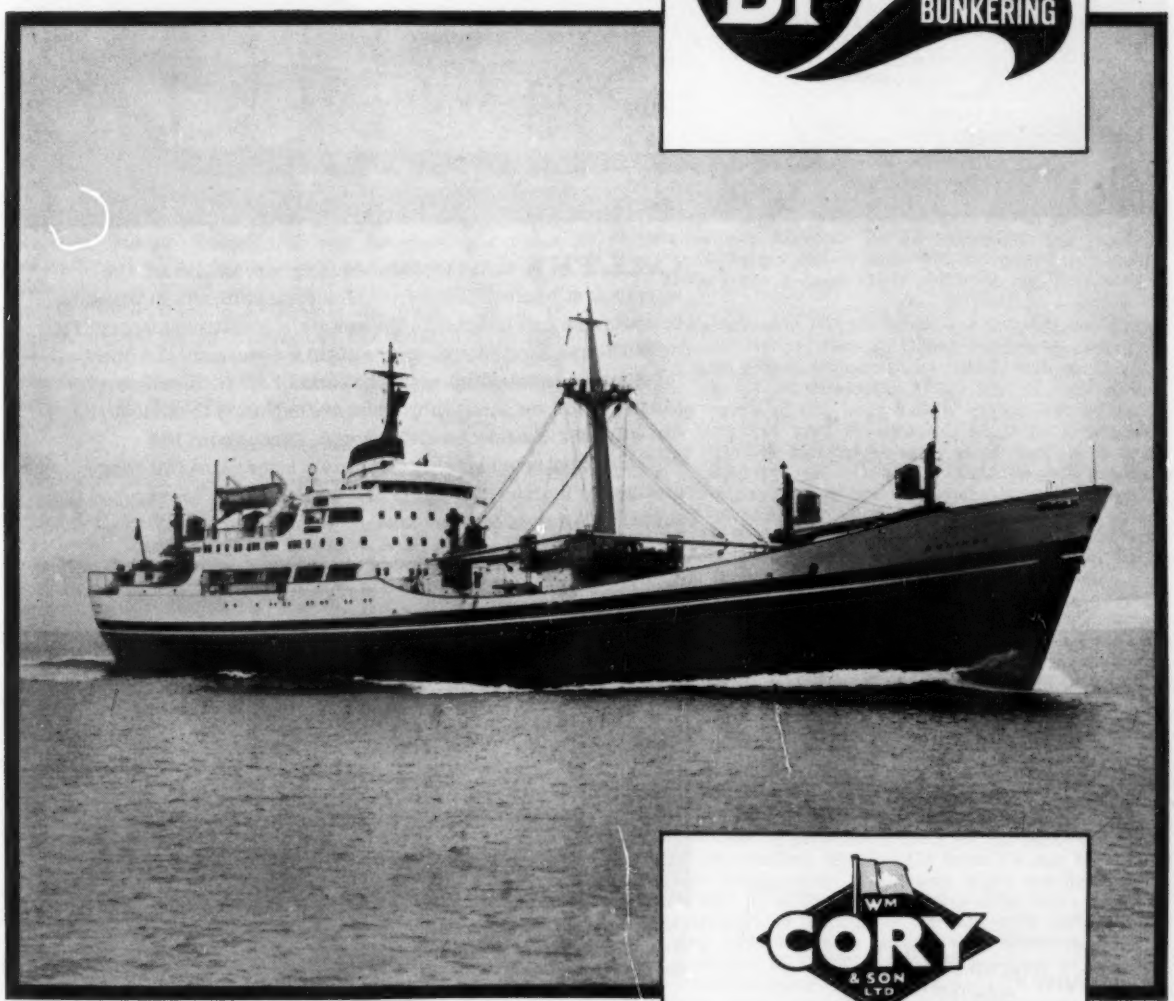
Cargo steamer *Loksang* (3,005 dwt, 3,324 grt, 1,865 nrt, built 1946 by Short Brothers Ltd) sold by Indo-China S.N. Co Ltd to other Hong Kong buyers and renamed *Frankford*.

Cargo steamer *Northwind* (ex-*Mina*, ex-*Tai Yun*, ex-*Hsin Foo Shin*, ex-*Atlantic Trader*, ex-*Frank J. Peterson*, ex-*Crathorne*, 2,241 grt, 1,349 nrt, built Ashtabula 1918 by the Great Lakes Engine Works) sold by Northwind Navigation Co (Panama) Ltd to Hong Kong breakers, having been lying at Hong Kong since January.

Cargo steamer *Arica* (4,540 grt, 2,825 nrt, built Port Glasgow 1931 by R. Duncan & Co Ltd) sold by Cia. Nav. Tole S.A., Monrovia, to Japanese shipbreakers.

OIL POWER FOR SHIPS

BP INTERNATIONAL BUNKERING



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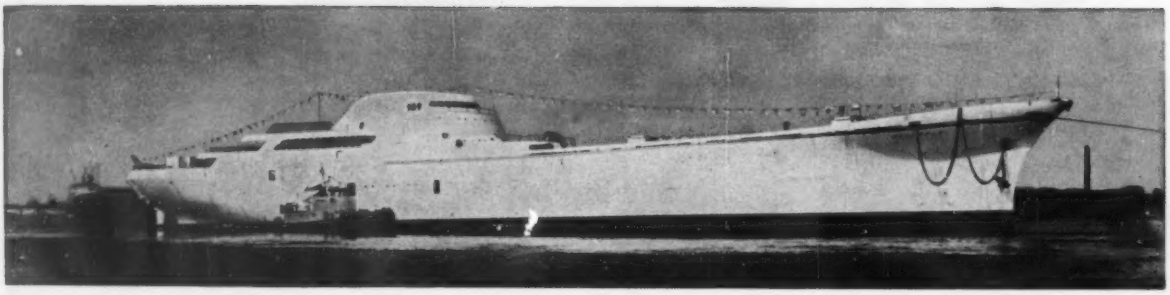

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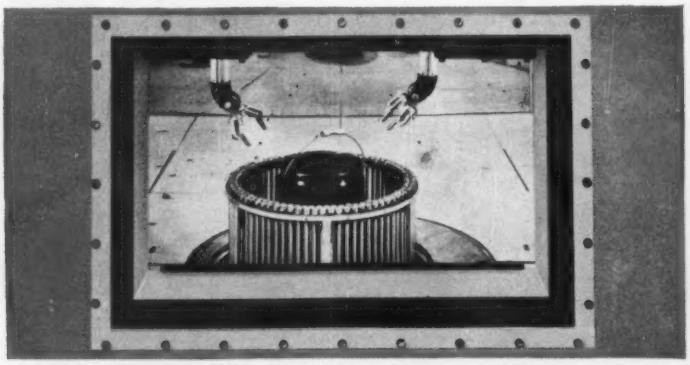

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Engineering & Marine Exhibition

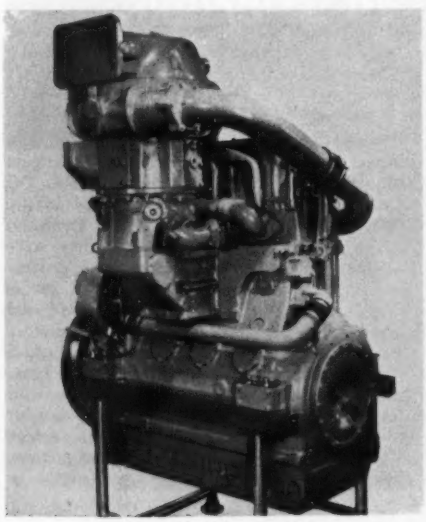
SOME OF THE EXHIBITS TO BE SHOWN AT OLYMPIA

The Engineering, Marine, Welding and Nuclear Energy Exhibition will open tomorrow at Olympia. It will occupy 275,000 sq ft of stand space in the three main halls and galleries, and is the 23rd exhibition to be held since the first "Shipping, Shipbuilding, Mercantile Marine & General Exhibition" was opened at Olympia half a century ago. At that time British engineering exports were only twelve per cent of the country's total overseas earnings from manufactured goods and produce—today they account for 43 per cent of the total. It is perhaps significant, though, that the title of the exhibition has changed and the word "marine" takes second place and "shipping", "shipbuilding" and "mercantile marine" have been dropped entirely.

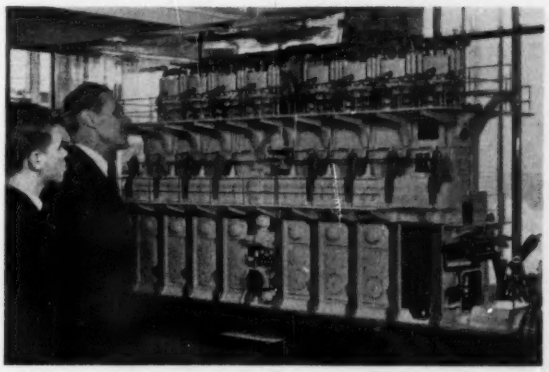
The exhibition will remain open until May 4 from 10 a.m. until 6 p.m., with the exception of May 1, 2 and 3, when it will stay open until 8 p.m. There will be a number of foreign exhibitors including Götaverken, Klockner-Humboldt-Deutz and Westfalia Separator AG, and it is good to note that Burmeister & Wain are exhibiting once again. From information so far received there does not seem to be a great deal of new equipment of special interest to marine engineers; though a visit may well show that in fact there are quite a lot of new ideas being presented. There is, however, a new Hamworthy pump of novel design, as well as a new Worthington cargo oil pump. Rolls-Royce will be showing a diesel generator set of a type which is now becoming increasingly used on board ship, and Clarke, Chapman & Co Ltd will have three new winches on show. It is, of course, impossible to include all the exhibitors in this preview, but it is hoped that it will be possible to deal with some of the items of special interest in forthcoming issues of The Shipping World.

Diesel Engines

Bristol Siddeley Engines Ltd. (Stands Nos 6 and 7, Row P, National Hall). Exhibits this year will include examples of Bristol Siddeley Proteus and Olympus-powered turbogenerators —a model of an important new development, the Bristol Siddeley transportable 3-mW generator pack is shown for the first time; examples of the Bristol Siddeley Maybach MD range of diesel engines for marine and locomotive propulsion; and models of *Ferocity* and *HMS Brave Borderer*, powered by gas turbines. The MD 225 diesel engine will be used in the new Seawork trawlers, the first of which was launched on March 16 at Gateshead. Twelve of these Bristol Siddeley Maybach engines were ordered in January for six trawlers. A model of the engine room installation shows the two MD 225 4-cylinder engines, pressure-charged and intercooled and of 394 bhp each. Bristol Siddeley Maybach are all lightweight high-speed engines, turbocharged and available with or without intercooling. The power range is from 360 to 3,600 bhp and from 4 to 16 cylinders.



Four-cylinder in-line 394-bhp Bristol Siddeley Maybach engine



Scale model of Götaverkens new large bore diesel engine, which develops 2,100 bhp per cylinder

A/S Burmeister & Wain's Maskin-og-Skibsbyggeri, Copenhagen (Stand No 16, Row J, Grand Hall), will present the world's most powerful diesel engine which, with its 12 cylinders, is capable of developing 25,200 bhp in daily service. Working models of two large B & W engines will be shown. One of them can talk, an ingenious telephone arrangement enabling it to tell the many visitors about itself. A B & W-Alpha engine, type 406-VO with controllable-pitch propeller, as well as a stationary engine will be shown, and through the media of pictures and cinema the exhibition gives an impression of B & W diesel engine production. At the same time, a display of parts for the large engines will enable visitors to form an idea of their impressive dimensions.

Coventry Victor Motor Co Ltd (Stand No 6, Row J, Grand Hall). Among their various exhibits this company will be displaying air and water-cooled petrol and diesel engines from 2½ up to 30 bhp output. There is a new air-cooled single-cylinder diesel engine of ⅝ bhp with a flange-mounted 3.5-kVA alternator, and also an air-cooled horizontally-opposed twin-cylinder diesel engine powered welding, cutting, power and lighting plant. This set has an output of 240 volts, 50 cycles and is trolley-mounted. It could fulfil an important role for marine salvage operations.

A/B Götaverken, Gothenburg (Stand No 12, Row E, Grand Hall). One item of particular interest on this stand will be the eight-cylinder working model of the latest 850 mm bore, 1,700 mm stroke diesel engine. This engine, which was described in The Shipping World of 30 November 1960, has a mean indicated pressure of 9.75 kg/sq cm, and with each cylinder developing 2,100 bhp it is possible with twelve cylinders to reach an output of 25,200 bhp. The first engine of this type, which is a ten-cylinder unit, has been installed in a 40,000-dwt oil tanker. These engines are turbocharged on the constant-pressure system. Other interesting exhibits will be a full-scale Hydrautorque hinge hatch cover with a section cut away so as to show the design of the hinge, and a working model of a new folding hatch cover. In addition there will be models of a 34,000-tons ore/oil carrier and an 11,000-dwt cargo liner.

Harland & Wolff Ltd (Stands Nos 4, Row F, and 5 Row G, Grand Hall). This company will be occupying its usual

stands and the exhibits chosen are representative of the variety of products which it manufactures. The company's shipbuilding programme is represented by a model of the 45,000-tons passenger liner *Canberra*. This vessel, which is the largest passenger liner built in the United Kingdom since the war, is now fitting out for the Peninsular & Oriental Steam Navigation Company, and is shortly due to leave Belfast on her sea trials. The marine diesel range is represented by a working model of a two-stroke single-acting opposed-piston crosshead type engine.

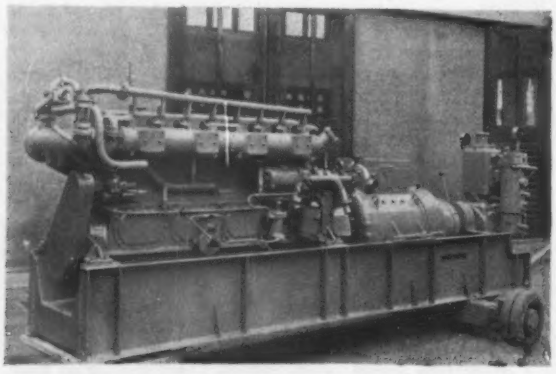
Hawker Siddeley Group Ltd (Stand 4, Row O, and 5, Row P, National Hall and Stand 14, Row H, Grand Hall). *Mirrlees, Bickerton & Day Ltd* (Stand 5, Row P, National Hall), will have on show for the first time a 4,400-bhp 16-cylinder turbocharged diesel engine. Weighing nearly 100 tons, this is the largest engine ever exhibited at Olympia. It is one of ten ordered by the Government of Ghana for the Tema Harbour power station, and will operate at a site rating of 4,159 bhp at 428 rpm.

National Gas & Oil Engine Co Ltd (Stand 4, Row O, National Hall). On this stand the principal exhibits will be a 364-bhp industrial engine coupled to a 260-kW Brush alternator, and a marine propulsion diesel rated at 475 bhp fitted with a 3:1 reverse-reduction gearbox. Other items of interest will include working scale models of a Sovereign marine diesel, sectioned to show its direct-reversing mechanism, and of the engines installed in the Canadian ferry *Princess of Vancouver*.

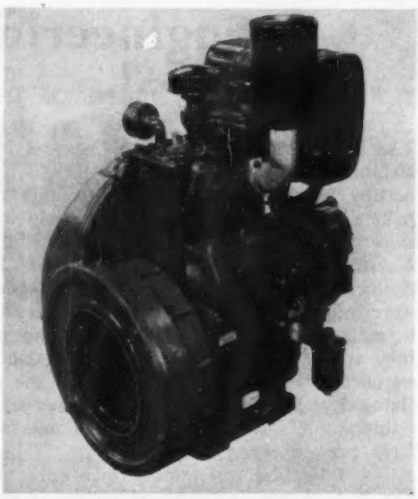
Brush Electrical Engineering Co Ltd (Stand 14, Row H, Ground Floor, Grand Hall), will show a schematic control panel illustrating the Brush diesel electrical propulsion system as installed in Britain's first diesel-electric ship-handling tug *Llanwern*, and now on order for four other vessels of various types. Other exhibits will include typical examples from a range of DC marine generators and motors from ½ to 2,000-shp, and two statically-excited alternators for use as marine auxiliaries.

Petters Ltd (Stand 36, Outer Row, Grand Hall Gallery). Six diesel propulsion units and one auxiliary set will be shown from the Petter range of engines. *Hawker Siddeley Brush Turbines Ltd* (Stand 4, Row O, National Hall). From a range of six turbochargers with free air capacities from 960 cu ft/min to 24,400 cu ft/min, H.S.B.T. will be showing a 30 Series and 50 Series suitable for diesel engines from 300 bhp upwards. Other exhibits will be a model of a radial-flow steam turbo-alternator and the rotor of a 200 Series gas expansion development turbine.

Leyland Motors Ltd (Stand 14, Row D, Grand Hall), will be showing a wide range of diesel engines from 70 to 265 bhp for machinery including fire pumps, generating plant and marine propulsion. The largest of the range of marine propulsion units incorporating Leyland diesel engines is the turbocharged Ajax Argonaut. This unit is based on the Leyland UE.902 direct-injection diesel engine and is fitted with Simms Eberspacher turbocharger. The unit has a power output of 207 bhp at 1,600 rpm at the continuous 24-hours rating. At the 12-hours rating it develops 226 bhp at 1,650 rpm and for a one-hour intermittent rating gives 265 bhp at 1,800 rpm.



Deutz diesel-driven 100 kVA generating set (see opposite page) on the stand of A. D. Struver K.G.



Ruston & Hornsby Distair diesel-driven air compressor, described on opposite page

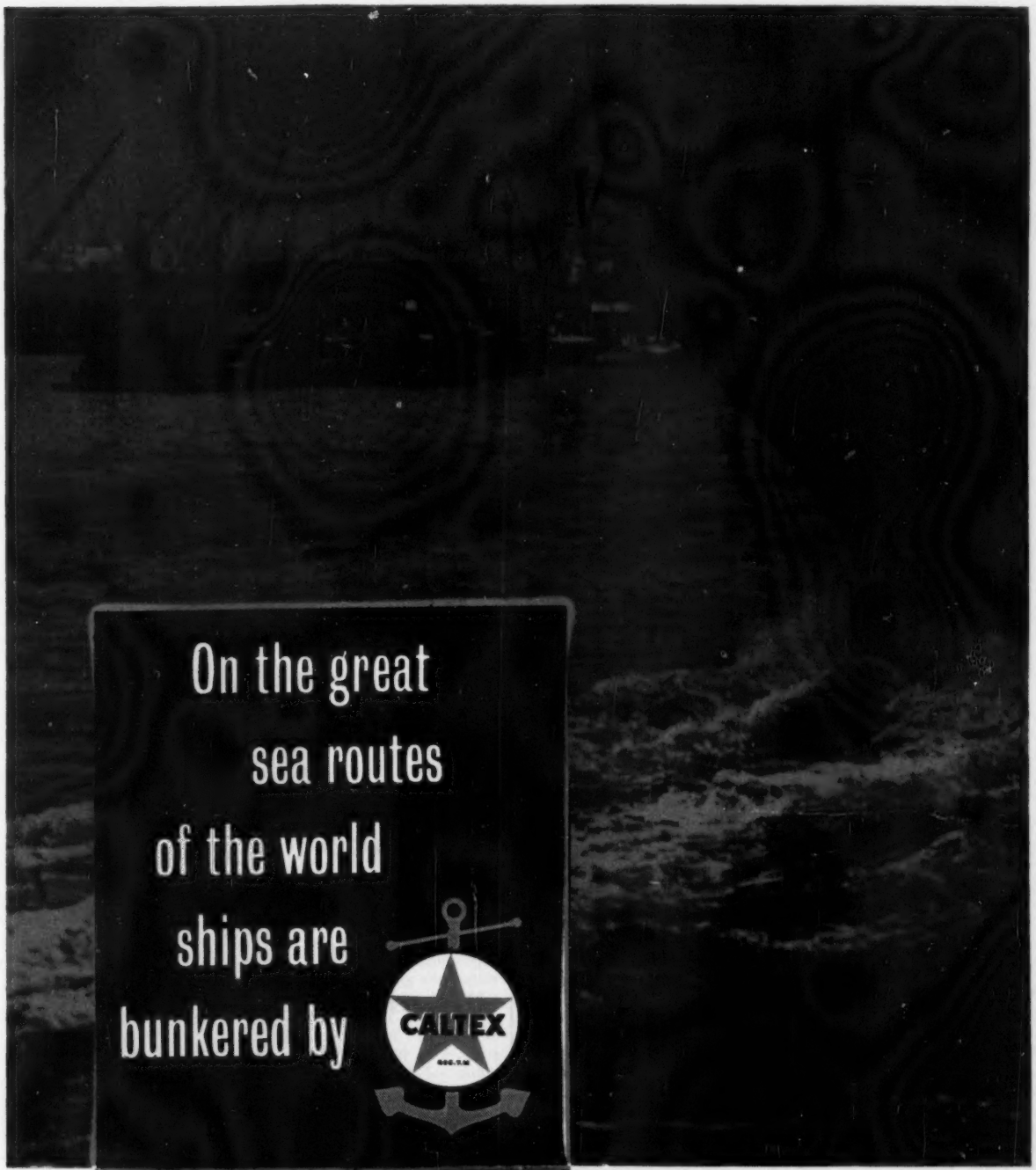
The engine is a six-cylinder four-stroke unit with a bore and stroke of 5½in by 6½in, giving a capacity of 926 cu in.

Lister Blackstone Marine Ltd (Stand No 2, Row D, Grand Hall). This stand will feature the main and auxiliary machinery for one of two twin-screw tugs which are now under construction by Richard Dunston Ltd for the Admiralty. The installation comprises two Lister Blackstone diesel engines, each rated at 660 hp, coupled through Hindmarch-MWD co-axial type reverse-reduction gears, and two Lister 90-hp auxiliary sets, one driving a 45-kW DC generator and a Hamworthy air compressor, the other powering a similar generator and a Hamworthy C3 pump. A smaller engine drives two Hamworthy pumps, one from each end, and a Hamworthy Distar compressor set is fitted for the starting air supply. In addition, a number of other Lister Blackstone marine engines will be displayed.

Models of Götaverken and Sulzer Engines

Richardsons Westgarth Group-Marine Division (Stand No 7, Row G, Grand Hall). Exhibits will include a model of a Götaverken engine of 10,000 bhp output at 112 rpm, typifying a range for which the North Eastern Marine Engineering Co Ltd are the sole licencees in the British Commonwealth. The first of six N.E.M.-Götaverken engines on order has recently been installed and is operating at 5,650 bhp in service in the 8,590-dwt cargo ship *Montrose*, built by Bartram & Sons Ltd to the order of Buries Markes Ltd. There is a model of the engine room of the Bartram-built fully refrigerated ship *Turakina* showing a Clark-Sulzer 8RD76 engine (10,400 bhp at 119 rpm) fitted with exhaust gas turbo-blowers, and a model of the machinery section of a 40,000 dwt tanker with Parsons Marine geared-turbine propelling machinery (max shp 17,600, max propeller rpm 108), and Richardsons Westgarth-Foster Wheeler watertube boilers (max evaporation 200,000 lb/hr. Steam at superheater outlet 600 lb/sq in, 850 deg F).

Rolls-Royce (Stand No 2, Row B, Grand Hall), will show a 331-bhp eight-cylinder turbocharged intercooled diesel engine coupled to a Campbell & Isherwood 220-kW 110-volts DC generator. This is one of a pair of sets to be fitted in the tankers *Norscot* and *Scotstoun*, operated by J. & J. Denholm (Management) Ltd (*SW*, 1.6.60). It is stated that they were ordered for these tankers in place of the steam-driven generators, which proved to be uneconomical. The other set is one of three to be fitted in the Union-Castle liner *Transvaal Castle*. Other recent orders for Rolls-Royce Petbow generators include one for four sets for installation in a vessel on order at Alexander Stephen & Sons Ltd for the Brocklebank Line, and four for the Jamaica Banana Producers Steamship Co, who have a ship on order at Lithgows Ltd. An interesting exhibit will be one of the Rolls-Royce Mk IV range diesel engines with individual four-valve cylinder heads and improved pistons, designed to produce 20 bhp more than the same engine in standard form.



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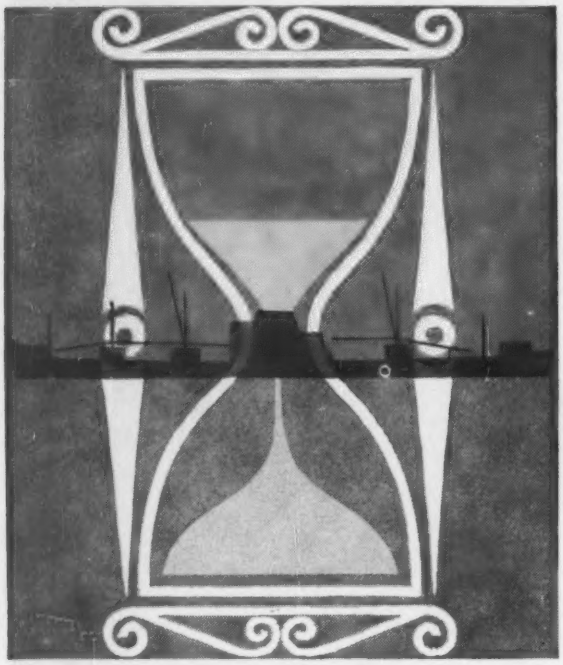

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Ruston & Hornsby Ltd and *Davey Paxman & Co Ltd* (Stand No 9, Row E, Grand Hall). New types of engines suitable for marine propulsion or auxiliary duties will be among the exhibits on the stand of the Ruston Group. The largest unit will be a five-cylinder propulsion engine from the AT series, Rustons latest range of large, medium-speed industrial and marine diesels. This engine, pressure-charged and intercooled, is rated at 835 shp at 500 rpm and is typical of the many now in service on tugs and trawlers.

An entirely new exhibit is the turbocharged 6YEXM which has been developed from the well-known YE diesel range. This is also a four-cycle direct injection type engine having six cylinders developing up to 175 bhp at 1,800 rpm. Yet another new exhibit with marine-auxiliary as well as industrial application is the two-cylinder YWAH air-compressor set. Actually, this is a Ruston two-cylinder 2YWA engine which has had one cylinder replaced by a Hamworthy Distair air-cooled single-stage air compressor.

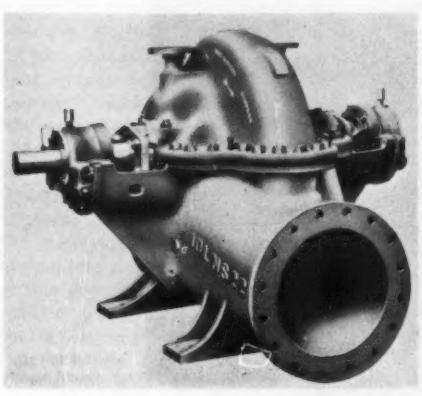
This year the Paxman exhibits on the Ruston Group stand place emphasis on this company's well known 7in bore range. While each of the two exhibits in this class have been designed for a separate field of duty, both exemplify an engine range backed by 25 years' development experience and in use throughout the world for all main types of diesel applications within 100/1,100 bhp class.

A.D. Struver K.G., Hamburg (Stand No 21, Outer Row, National Hall Gallery). This company will be exhibiting a Deutz diesel engine type F2L 712 developing 15 hp at 1,500 rpm, driving a 24/30-volts DC compound-wound generator of 3.5 kW output, a self-priming centrifugal pump of 60/20 cu m/hr capacity at a head of 25/30 m, and a self-priming lubricating oil pump having an output of 170 litres/min.

Pumps

Mono Pumps Ltd (Stand No 25, Inner Row, Grand Hall Gallery). Two new arrangements of the Mono marine water pressure system will be shown by the company's Marine Division. Both sets incorporate pumps and all control equipment as complete units to save space and to simplify installation. One set consists of a twin pump unit which can be produced in units suitable for fresh or sanitary water up to 35 tons/hour. Control panels are available for switching as duty and standby during off peak periods or as booster pumps to double capacity at abnormal or full peak times. The second set is a smaller version of the 'M' type Mini-pack pressure system. This unit is a "packaged" unit incorporating the pump and controls integrally with a 20-gallon pressure tank. The F82 Mono 67-tons capacity Mono pump is also displayed.

Worthington-Simpson Ltd (Stand No 4, Row S, National Hall) will be showing a selection of Monobloc centrifugal, steam and power pumps, together with reciprocating and rotary air compressors. One new exhibit which will be on view for the first time is their latest cargo oil pump. This pump, which will handle 1,350 tons/hour against a pressure of 150 lb/sq in when running at 1,800 rpm, is of the horizontal split-casing single-stage centrifugal type. It can be arranged for either steam turbine or electric motor drive through intershafting fitted with special bulkhead bearings and seals.



Worthington-Simpson 1,350-tons/hour cargo oil pump

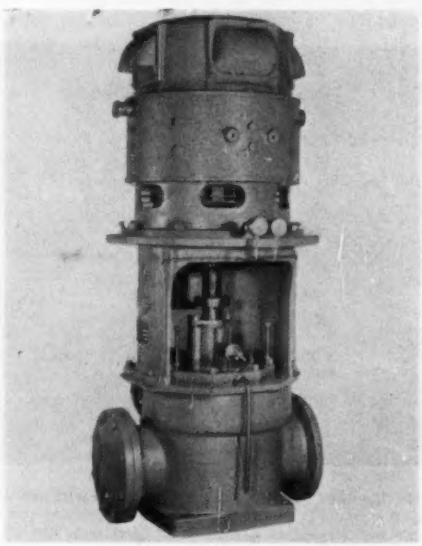
THE "DOLPHIN" CENTRIFUGAL PUMP

New Range of Hamworthy Vertical Pumps

A NEW range of vertical centrifugal pumps has been developed by Hamworthy Engineering Ltd, Poole, Dorset, and is being shown at the Engineering & Marine Exhibition at Olympia (Stand No 13, Row F, Grand Hall). This new range has been designed to cover a wide field of duties within a small number of frame sizes, and at the same time give maximum installation flexibility and maintenance access in a simple robust construction. Designed specifically for marine duties such as fresh and salt water circulation, bilge, ballast, fire etc, the pumps have also proved very successful for industrial duties with fluids such as petrol, solvents, light oils etc.

The capacities of the new range are from 60 up to 2,000 galls/min with heads up to 300ft. The wide performance coverage is achieved by only three frame sizes with an interchange of impellers and diffusers to give any desired operating condition; thus enabling one type and size of pump to be used for a very wide variety of duties and ensuring a high component interchangeability. A feature of these pumps is that they can be dismantled in a matter of minutes by inexperienced operators. A number of production units are already in service.

The main casing has two diametrically-opposite suction flanges to give a choice of connection and allows the single discharge to be brought to the desired position. The motor support pedestal mounted on top of the casing has a large opening for easy access to the pump itself and also may be turned to any one of four positions. Thus the pump is not limited to any particular mounting position and can be rotated so that maximum accessibility can be achieved in restricted spaces. The flanges are constructed in such a way that the effect of pipe stress is eliminated.



The Hamworthy "Dolphin" centrifugal pump—ranges are from 60 up to 2,000 galls/minute

The impeller is supported by a short, heavy-section shaft running in a single bearing which may be either grease or water lubricated. Either a soft-packed gland or various types of mechanical seals can be fitted as required. The bearing and shaft can be supplied in special corrosion resistant materials to suit the pumping medium. A short coupling spacer fitted between the motor coupling and shaft facilitates the dismantling procedure which is one of the most interesting features of the pump. To take out the complete impeller assembly, it is only necessary to remove the coupling screws, take out the spacer, remove screws from top cover and withdraw the rotating element complete with top cover bearing and gland from the main casing. Suction and pressure gauges are fitted as standard equipment and self-priming or non self-priming units can be supplied as required.

The Tanker

FIRST SHIP BUILT

The captain's office. The furniture is of polished teak

The officers' dayroom above has panels of Marinite with oak veneer and polished oak furniture

In the saloon the panels are of Marinite with bird's eye maple veneer and the ceilings of Marinite with plastic

The officers' dining saloon

"Mobil Enterprise"

IN ERIKSBERGS NEW DRYDOCK

THE FIRST of a series of five sister ships on order from Eriksbergs Mek. Verkstads A/B, Gothenburg, has been delivered. This vessel, the *Mobil Enterprise*, 50,700 dwt, is an oil tanker owned by Mobil Tankships Ltd, Hamilton, Bermuda, for whom the other four ships are being built. She is the largest vessel to be built for these owners and the largest yet built by Eriksbergs. The launch of the *Mobil Enterprise* in June 1960 coincided with the inauguration of the new dry dock, the dimensions of which are: length 915ft, breadth 145ft and depth 38ft. Work on the dock gate, cranes, pumping plant etc was carried out while the hull of the new ship was being constructed.

The *Mobil Enterprise* was contracted for a capacity of about 48,600 dwt, but owing to improvements in design it was found possible to increase the deadweight to 50,700 tons. Propulsion is by steam turbine machinery and her speed in service 16½ knots. The principal particulars of the *Mobil Enterprise* are as follows:—

Length o.a.	735ft 5in
Length b.p.	703ft
Breadth moulded	104ft
Depth moulded	51ft
Draught fully loaded	38ft 7in
Deadweight	50,700 tons
Machinery output	18,000 shp
Service speed	16½ knots

With the exception of the sheerstrake, bilke strake and stringer, the seams of which are riveted, the hull is entirely of welded construction. Two longitudinal and eleven transverse bulkheads form 30 cargo compartments having a total capacity of 2,356,229 cu ft. No 5 centre and wing tanks, which have a capacity of 238,523 cu ft, are arranged for water ballast.

In the main pump room immediately forward of the engine room there are four steam turbine-driven pumps, three of which are for pumping oil cargo and one for ballast water and having a total capacity of about 5,400 tons/hour. The fuel oil is carried in crossbunkers aft and in deep tanks forward.

The accommodation for deck officers is located in the deckhouse amidships, for the engineer officers in deckhouses on the poop deck and boat deck aft, and for the crew in the poop. Saloons, messes and dayrooms are arranged adjacent to the respective accommodation. The whole accommodation is air-conditioned. Having regard to fire protection all accommodation bulkheads are made of steel or Marinite and the furniture is mainly of steel.

The navigational equipment includes SAL log, gyrocompass with auto-pilot, echo sounding and radar. The radio equipment has been supplied by the marine department of A.E.I. Telecommunications Division. The main radio MF and HF transmitters are new designs by this department and have a carrier power of 600 watts. The emergency assembly is also of a new design and is capable of W/T communication on working frequencies in the 405/525 kc/s band in the event of mains power failure, as well as for the usual distress purposes.

The hospital. Walls and ceiling are covered with painted Marinite and the floor with white tiles

The propulsion machinery consists of one set of de Laval steam turbines developing 18,000 shp at 110 rpm. The contract speed is 16½ knots. There are two boilers, built by Motala Verkstad under licence from the Foster Wheeler Corporation, having a total capacity of about 118 tons steam/hour. The steam supplied by the boilers has a pressure of 47 kg/cm² and a temperature of 465 deg C.

The auxiliary machinery includes two steam turbine driven alternators, each of 600 kW with turbines of de Laval make, and one diesel alternator of General Motors type with an output of 150 kW.

THE SECOND 18,000-bhp diesel marine engine to be built in Japan is scheduled to be ready for shop trials on May 13. Of the Sulzer 9RD90-type, it is under construction at the Aioi shipyard of Ishikawajima-Harima Heavy Industries for a 47,250-dwt tanker, due to be launched on April 29 for Sanko Kisen. The 9-cylinder engine operates at 119 rpm and has a stroke of 1,550 mm. It is 18.95 metres in length and 9.4 metres in breadth and weighs 718 tons.

NEW CONTRACTS

Shipowners	No. of Ships	Type	Tons d.w. (gross)	Dimensions (ft.) L.b.p.(o.a.) × B × D.(dft.)	Delivery	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Yards in Great Britain and Northern Ireland										
Currie Line	1	Cargo	13,100	—	end-62	—	—	—	—	Lithgows Ltd
Overseas Yards										
Det Nordenfjeldske D/S/S	1	Tanker	50,000	—	May 1963	—	10-cyl M.A.N. diesel	17,500	Shipbuilders	Kockums M.V.
do.	1	Refrig. cargo	1,250	(239) × 38	8/62	13.25	Diesel	1,670	—	Fr. Lurssen Werft
Einar Rasmussen	1	Tanker	42,500	—	end-63	16.25	B & W diesel	16,500	Shipbuilders	Eriksbergs M.V.
Leyland Tankers Ltd, London	1	River tanker	525	—	—	—	—	—	—	Roland Werft
Bernhard Schulte (managers)	1	Cargo	4,300	—	mid-62	14	M.A.N. diesel	2,260	—	Paul Lindenau
Fridtjof Kristiansen, Oslo	1	Cargo	1,400	—	10/62	—	Diesel	1,250	—	J. J. Sietas, Hamburg
A/S Dux (Victor L. Schage,) Oslo	1	Cargo	1,900 (500)	—	mid-62	—	Diesel	—	—	Euskalduna, Bilbao
E. H. Kongshavn, Haugesund	1	Cargo	5,000	—	1962	—	Diesel	—	—	Euskalduna, Bilbao
J. M. Johansens, Bergen	1	Cargo	1,900 (500)	—	1963	—	Diesel	—	—	Euskalduna, Bilbao
Norwegian owners	7	Cargo	1,900 (500)	—	1962/63	—	Diesel	—	—	Euskalduna, Bilbao
Norwegian owners	5	Cargo	4,000	—	1962/63	—	Diesel	—	—	Euskalduna, Bilbao
Norwegian owners	1	Cargo	5,000	—	1962	—	Diesel	—	—	Euskalduna, Bilbao

LAUNCHES

Date	Shipowners	Ship's Name and/or Yard No.	Type	Tons d.w. (gross)	Dimensions (ft.) L.b.p.(o.a.) × B. × D.(dft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Yards in Great Britain and Northern Ireland										
Apr. 5	Caledonian S.P. Co	*Caledonian Princess* (1501)	Psngr./ car ferry	620 (3,400)	(353) × 55 × 17.5(12)	20.5	Tw.-scr. turbine	—	Shipbuilders	Wm. Denny
Apr. 6	Denizcilik Bankasi, Istanbul	*Genclik* (806)	Ferry	(1,000)	—	—	Tw.-scr. diesel	—	—	Fairfield
Apr. 11	Ross Group Ltd	*Ross Eagle*	Trawler	(265)	107.5 × 24.5 × 12.5	—	5-cyl diesel	550	Ruston & Hornsby	Cochrane & Sons
Apr. 12	Burwood Fishing Co, Aberdeen	*Clarkwood*	Trawler	(250)	—	—	Mirrlees diesel	—	Mirrlees, Bickerton & Day	T. Mitchison
Apr. 13	St. Denis Shipping Co	*Dukesgarth*	Ore carrier	15,000	480 × 70 × 36.25 (27.95)	12.5	Doxford diesel	4,400	N.E. Marine	Blyth D.D.
Apr. 13	Bank Line	*Larchbank*	Cargo	12,030	450 × 62 × 38.5	—	4-cyl diesel	4,800	Shipbuilders	Wm. Doxford
Apr. 14	Moor Line	*Linkmoor*	Cargo	1,780	(435) × 60.5	15	Doxford diesel	5,500	Shipbuilders	Hawthorn, Leslie
Apr. 14	Sverre Ditlev-Simonsen	*Virana*	Bulk carrier	18,650	525 × 70	13.5	6-cyl Harland-B & W diesel	6,500	J. G. Kincaid	Short Bros.
Apr. 17	Ben Line	*Bengloe*	Cargo	11,210 (11,460)	549.6 × 71.25 × 30	19	Turbine	—	D. Rowan	Chas. Connell
Overseas Yards										
Mar. 23	U.S.S.R.	*Balaklava* (170002)	Tanker	(12,800) 18,000	—	—	Diesel	—	—	Stocznia Gdanska
Apr. 4	Thomas Entz	*Elizabeth Entz* (1336)	Ore/oil carrier	(23,000)	—	—	Turbine	—	—	A. G. Weser, Bremen

TRIAL TRIPS

Date	Shipowners	Ship's Name and/or Yard No.	Type	Tons d.w. (gross)	Dimensions (ft.) L.b.p.(o.a.) × B. × D.(dft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Yards in Great Britain and Northern Ireland										
Apr. 8	Interessentskapet Krossfonn (Sigval Bergesen)	*Krossfonn* (1619)	Bulk carrier	19,000	520(558) × 70 × 42.75	—	5-cyl H & W-B & W diesel	—	Shipbuilders	Harland & Wolff, Belfast
Apr. 13	Furness, Withy & Co	*Tudor Prince*	Tanker	18,625 (12,958)	559.25 × 72 × 30.15	15	6-cyl diesel	—	Shipbuilders	Wm. Doxford
Overseas Yards										
Feb. —	Anders Jahre	*Jarita*	Cargo	12,800 (9,772)	461.58(496.75) × 62.1 × (29.75)	15	8-cyl M.A.N. diesel	6,500	Shipbuilders	Kieler Howaldtswerke
Feb. 3	Marine Transport Line	*Leland I. Doan* (1676)	Tanker	16,200 (10,800)	524(551.1) × 68 × 37.5 (29.67)	15.5	Geared turbine	7,700	Shipbuilders	Bethlehem Steel Co, Quincy
Mar. —	Soc. Nav. Caennaise	*Amalthee*	Cargo	3,600 (2,350)	301.9(325.5) × 47.5 × (225)	18	Two Pielstick diesels	5,680	Shipbuilders	At. et Ch. de Bretagne
Mar. —	Charente S.S. Co	*Explorer* (490)	Cargo	7,500 (6,300)	400(440) × 59.5 × 36 (26)	15.5	5-cyl diesel	5,500	Sulzer Bros.	Nederlandsche Dok
Mar. —	German Ministry of Traffic	*Johannes Gahrs* (174)	Dredger	(5,000)	341.25 × 59.1 × (19.33)	12	Diesel	6,000	Maybach	Werf Gusto
Mar. —	Eastern Shipping Corp	*State of Uttar Pradesh* (145)	Cargo	9,300 (6,500)	470.75(509.5) × 63.2 × (25.67)	17	9-cyl diesel	8,100	M.A.N.	Hindustan Shipyard
Mar. —	Nederlandse Pacific Tankvaart Mij.	*Caltex Madrid* (803)	Tanker	47,735 (30,000)	700(735) × 105 × 49 (36.42)	17 (T)	Westinghouse geared turbine	17,000	Shipbuilders	Cockerill-Ougree
Mar. —	Texaco Panama Inc.	*Texaco Anacortes* (646)	Tanker	46,800 (26,300)	705(736) × 99 × 50.33 (37.58)	16.5	Geared turbine	19,000	Ishikawajima-Harima H.I.	Mitsui S.B. & E.
Mar. —	Villain & Fassio	*Antonietta Fassio* (1555)	Tanker	50,750 (35,800)	751.75 × 105.67 × 53.2	18	Geared turbine	21,000	Shipbuilders	Ansaldo S.A., Leghorn
Mar. —	Jugoslavenska Linijska Plovidba	*Primorje* (467)	Cargo	10,500 (8,500)	475.75(508.58) × 67.75 × (27)	20 (T)	8-cyl Sulzer diesel	10,400	C.R.D.A.	Brodogradiliste "3 Maj"
Mar. —	Gulf Oil Co	*Tasman Sea* (978)	Tanker	38,937 (24,700)	672.5 × 92.5 × 48.58 (36.42)	17 (T)	Geared turbine	16,500	Shipbuilders	Kawasaki Dockyard
Mar. —	Bugsier Reederei	*Neuharlingersiel* (947)	Cargo	12,400 (9,400)	(532.5) × 65.25 × (26.2)	18.5	9-cyl Fiat diesel	10,000	Borsig A.G.	Howaldtswerke
Mar. 23	Chr. Salvesen & Co	*Salmela* (368)	Cargo	12,670 (8,972)	441.75(486.75) × 61.5 × 30.5(30)	15	Diesel	5,600	Gotaverken	Oskarshamns Varv
Mar. 24	Mobil Tankships, Bermuda	*Mobil Enterprise* (558)	Tanker	49,000 (30,000)	703(735.25) × 104 × 51.5(38.5)	16.75	Geared turbine	16,500	De Laval	Eriksbergs
Mar. 29	Partenreederei MS "Hendrik Fisser" (Fisser & v. Doornum)	*Hendrik Fisser* (326)	Cargo	15,100 (10,925)	475.75(515) × 67 × (30)	14	t/c diesel	5,400	M.A.N.	Rheinstahl Noordseewerke
Mar. 29	Wilh. Wilhelmsen	*Trianon* (529)	Cargo	12,625	470 × 68 × 41.5	17.5	B & W diesel	12,500	Shipbuilders	Eriksbergs M.V.

MARITIME NEWS IN BRIEF

Mr E. L. Denny, chairman of William Denny & Bros Ltd, Dumbarton, is to retire from the chairmanship and also from the board of directors in May. The directors intend to ask Mr Denny to become president of the company. Mr W. D. K. Marshall has been appointed to succeed Mr Denny as chairman, Mr F. R. Topping has been appointed as deputy chairman, and Mr C. F. Morris, naval architect, has been appointed a director.

Captain H. E. Sang, commodore of Royal Mail Lines Ltd, is to retire when his ship, the 20,000-tons passenger liner *Amazon*, returns to London next month. Captain Sang joined the company as cadet in June 1917 and was appointed commodore on New Year's Day, 1960.

Mr C. W. Warwick, of Houlder Brothers & Co Ltd, and Mr L. W. Phillips, of T. A. Jones & Co. Ltd, have been elected chairman and vice-chairman respectively of the Baltic Exchange. Mr Warwick, who has been vice-chairman since 1959, has been a member of the Exchange since 1920, while Mr Phillips was elected to membership in 1919.

Mr W. N. H. van der Vorm, who resigned as president managing director of the Holland-America Line, has been elected chairman of the board of directors. Managing directors are Jonkheer H. Reuchlin, Mr P. C. van Houten and Dr H. N. Dutilh. A proposal to appoint also Mr J. W. Brand as managing director of the company will be submitted to the general meeting of shareholders on May 8. Mr Brand now holds the position of a managing director of the Royal Packet Navigation Company Ltd.

On the amalgamation of the Directorate of Navy Accounts and the Expense Accounts Department, the First Lord has approved the appointment of Mr L. R. Palmer as Principal Director of Accounts. Mr Palmer is at present serving as Director of Victualling and is succeeded in that appointment by Mr J. M. Widdecombe.

Mr J. V. Ramsay has retired from the position of manager of new construction for the Hongkong & Whampoa Dock Co Ltd, Kowloon Docks, Hong Kong, after over 44 years' service. Mr W. Chambers, formerly of Vickers-Armstrongs (Shipbuilders) Ltd, and Wallsend Slipway & Engineering Co Ltd, has been appointed to succeed Mr Ramsay.

MR J. W. DIXON and MR G. B. SIBLEY has been appointed directors of the British India Steam Navigation Co Ltd. Mr Dixon joined the shipping side of Gray, Dawes & Company, then London agents for the B.I.S.N., in 1931. In 1934 he went to India as an assistant to Mackinnon, Mackenzie & Company, and served with them in Calcutta, Colombo, Bombay and Delhi until 1952. He rejoined Gray, Dawes & Company in 1952 and on the reorganisation of the B.I.S.N. Co in 1957, he was transferred to that company as a general manager. Mr Sibley joined Gray, Dawes in 1927 and was appointed to Mackinnon, Mackenzie & Company in 1931 with whom he served in India and Burma. He joined the B.I.S.N. Co in June 1947 and was appointed assistant secretary in 1950. On the reorganisation of the company in 1957 he became a general manager and has been responsible for the company's technical side and development of the tanker business

LONDON TROLLEYBUSES EXPORTED

This trollybus is one of 80 redundant London Transport vehicles which have been sold for a new span of life in Spain. It is being loaded at Samuel Williams & Sons' Dagenham Dock. This dockside covers 400 acres for storage and loading. The trolleybuses arrived at the dockside by road and are the first London Transport trolleybuses to be sold abroad

Mr G. G. Lautzenhiser has been appointed traffic manager of the Port of Anchorage. Mr. Lautzenhiser has been associated with the Luckenbach Steamship Company for the past four years.

Mr R. B. Hesselden has been appointed a director of the Holset Engineering Co Ltd. Mr R. Barr has been appointed works manager.

Mr C. E. Harrison has been elected president of the Federation of British Industries. He succeeds Sir William McFadzean, president for the past two years.

Mr A. A. Bruneau and Mr R. J. Moyse have been elected directors of Alcan Industries Ltd.

Mr J. B. Moore has been appointed sales manager for the Curtis Bay Towing Company at New York.

* * * *

Captain D. R. Macfarlane, commodore of the Blue Star Line, has retired from command of the *Paraguay Star* after having served with the Blue Star Line since 1915. Capt. Macfarlane first went to sea in 1910, joining the Union Steamship Company. After that he went into sail and it is on record that one of the longest voyages made by him was from New Caledonia to Glasgow, taking six months to the day. After he joined the Blue Star Line he was promoted to chief officer in 1917 at the age of 22, and four years later at the age of 26 was given his first command.

The Pelton Steamship Co Ltd, Newcastle, is to be voluntarily liquidated. The company had been in existence for over 60 years, and had recently owned three ships, totalling about 10,000 grt, which operated as general traders.

The Penarth, Pontoon, Slipway & Ship-Repairing Co Ltd, Penarth Dock, have ceased their shiprepairing activities. In future the firm are to concentrate on general engineering.

BOAC 707 jetliners will open the first through service between London and Washington on June 2, subject to Government approval, with a frequency which will become daily after the first week.

Mr I. M. Stewart has been elected president of the Institution of Engineers & Shipbuilders in Scotland for 1961/62. Mr S. W. Boswell and Mr A. R. Mitchell have been elected vice-presidents for the period 1961/64.

Statistics compiled by the Chamber of Shipping of the United Kingdom show that on April 1 there were 386 vessels

totalling 2,801,900 tons gross laid up in the world, of which 186 vessels of 1,734,058 grt were tankers. No ships built since 1955 were laid up.

The Chamber of Shipping index number of tramp shipping freights for March was 77.2 (1952=100), compared with 78.2 in February. The time charter index was 70.0, compared with 65.1 for the previous month.

The death has occurred of Mr John C. Coleman, managing director of the Ardrossan Dockyard Ltd, which he joined in 1928.

Mr J. E. Hobbs has been appointed a director of Tate & Lyle Ltd, Tate & Lyle Investments Ltd and Silvertown Services Ltd.

Management of the Sugar Line Ltd is to be transferred from the Athel Line Ltd to Silvertown Services Shipping Ltd by the end of the year.

* * * *

Three appointments have been made by firms in the Lithgow group. Mr James Lenaghan, managing director of the Fairfield S.B. & E. Co Ltd, has been appointed a director of David Rowan & Co Ltd, marine engineers. Mr D. B. Kimber, shipbuilding manager of Fairfield since 1959, has been appointed a director. Mr George H. Parker has been appointed assistant general manager of Lithgows Ltd. He joined Lithgows as an assistant manager in 1955, and later was appointed assistant yard manager.

The Mersey Docks & Harbour Board has appointed Mr C. A. Dove to be deputy general manager and secretary with a view to succeeding Mr A. S. Mountfield as general manager and secretary in April next year. Mr Dove is at present chairman and general manager of the Nigerian Ports Authority. It is with great regret that the Board has had to consider the retirement of Mr Mountfield, owing to health reasons, earlier than would normally have been expected.

Clelands Ltd, Wallsend-on-Tyne, have completed the contract for lengthening the coastal tanker *Ben Hittinger*. A new mid-section 21ft long has been inserted, and the ship's cargo capacity increased by 168 tons to 678 tons.

At the annual meeting of the River Tees Liner Agents' Association at Middlesbrough, Mr J. Hagger (Waltons Ltd) was elected chairman in succession to Mr A. McMaster (Peckston Ltd). Mr H. Platts (T. A. Bulmer & Co Ltd) was re-elected secretary/treasurer.

Smith's Dock Co Ltd has completed a contract for converting the tanker *Gretafield* (16,000 dwt) into a bulk cargo carrier. The work lasted five months. The *Gretafield* is the second tanker owned by Hunting & Son to be converted in this way, the first being the *Duffield*, which was dealt with last year.

The maiden voyage of the Booth liner *Anselm* to Portugal, Madeira, Barbados, Trinidad and the River Amazon will be from Liverpool on 16 June 1961 and subsequent voyages are scheduled to start from Liverpool on 25 August 1961, 10 November 1961, 19 January 1962 and 20 April 1962.

Mr W. Rouse has joined Bolinders Co Ltd as sales engineer for Gotaverken engines. He served apprenticeship with Craven Bros (Manchester) Ltd, and served as engineer from 1944 to 1950 with various shipping companies. He came ashore in 1950 to supervise the building of new tonnage for Compania Sud Americana de Vapores of Valparaiso in the U.K., and then served as engineer surveyor with Lloyd's Register of Shipping at Newcastle upon Tyne, coming to London in 1953 to take up an appointment with Burls Gordon & Rogers, consulting engineers and naval architects. In 1956 joined the Aviation & Shipping Co Ltd as assistant superintendent and succeeded to the position of marine and engineer superintendent in 1958.

The address of Stove Shipping (Lorentzens Rederi Co A/S and Lorentzens Kysttank Rederi A/S) and Belships Co Ltd Skibs A/S (Christen Smith Shipping Co) is now Haakon VII's Gate 6, Oslo, Norway.

Mr C. A. Winn is to retire as joint managing director of C. H. Bailey Ltd, but will remain a director. Mr M. R. L. Hayes is to join the board, and is at a later date to become general manager.

BOOK REVIEWS

Painted Ports, by Captain A. G. Course. (Hollis & Carter, 25 Ashley Place, London SW1. Price 30s.)

The name Devitt & Moore today is associated mainly with the Nautical College at Pangbourne, but during the 55 years of the firm as shipowners they owned 29 square-rigged sailing ships and only two steamships (or "steam kettles" as they were called by square-riggers). It is the story of these sailing ships in the Australia trade, with their painted ports, that Captain Course concentrates on in his latest book. His natural fluency as a writer is admirably backed by his own long personal experience at sea under sail and steam, and supported by meticulous research with an eye to detail and accuracy. The text is well supported by illustrations, fleet lists and an admirable index.

The Book of Flags, by Gordon Campbell and I. O. Evans. (Oxford University Press, Warwick Square, London EC4. Price 15s.)

This is the fourth edition of the useful and interesting survey of flags of the world by the late Vice-Admiral Gordon Campbell and Mr I. O. Evans, who revised it in 1957. It is easy to read and understand, helped as it is by the numerous illustrations, both in colour and colour-key line drawings. Only a short chapter is devoted to the houseflags of shipping companies, a subject which, of course, needs a volume to itself. It is perhaps unfortunate that of the 24 houseflags and funnels illustrated in colour, no fewer than eleven have now disappeared from the sea, but at least the ones chosen do illustrate the points brought out in the text.

Rigging, Equipment and Outfit of Ships, Part II, by Ing. J. P. de Haan. (The Technical Publishing Company H. Stam N.V., Zijlweg 1, Haarlem, The Netherlands. Price 245 guilders.)

This book forms part of a series, published in English, dealing with the design and construction of ships and marine engines. The whole series, which is being edited by Prof Dr Ir. W. P. A. van Lammeren, superintendent of the Wageningen tank, is planned on a massive and comprehensive scale. The present volume is the second of two on its particular subject written by the manager of Wilton-Fijenoord, Part I having appeared in 1957. It is a volume of 686 pages with more than 1,350 figures and diagrams, and goes into meticulous detail on every point. At times the detail may be found a little overpowering, but this is a good fault in what is essentially a book of reference. To date some half-dozen volumes have been published in this series, and it will be completed with the publication of a like number more.

FIFTY YEARS AGO

From THE SHIPPING WORLD of 19 April 1911

The Bureau of Navigation, Department of Commerce and Labour, Washington, directs attention to Section 1 of the Wireless Ship Act of June 24, 1910, which states that from and after July 1 of this year "it shall be unlawful for any ocean-going steamer of the United States, or of any foreign country, carrying passengers and carrying fifty or more persons, including passengers and crew, to leave or attempt to leave any port of the United States unless such steamer shall be equipped with an efficient apparatus for radio-communication, in good working order, in charge of a person skilled in the use of such apparatus, which apparatus shall be capable of transmitting and receiving messages over a distance of at least 100 miles, night or day." The provisions of this Act, however, do not apply to steamers plying only between ports less than 200 miles apart.

An interesting experiment took place off Monte Carlo in connection with the first trial of the Fabres marine aeroplane. The machine which has a boatlike bottom, rose from the sea and into the air and flew for about 500 yards. The sea was rather rough and the trial was a short one, but we expect to hear more of this mechanical porpoise.

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5 The cost of the tender documents must be sent separately to that called for in paragraph three of this tender notice. If sent by cheque or Post Order it should be crossed, and made payable to the "High Commission for India", London.

6 Specimen copy of this enquiry can be seen at Engineering Branch, India Store Department, Bromyard Avenue, Acton, W.3, under the following reference. S.4235/60/NSC/ENG. 2.

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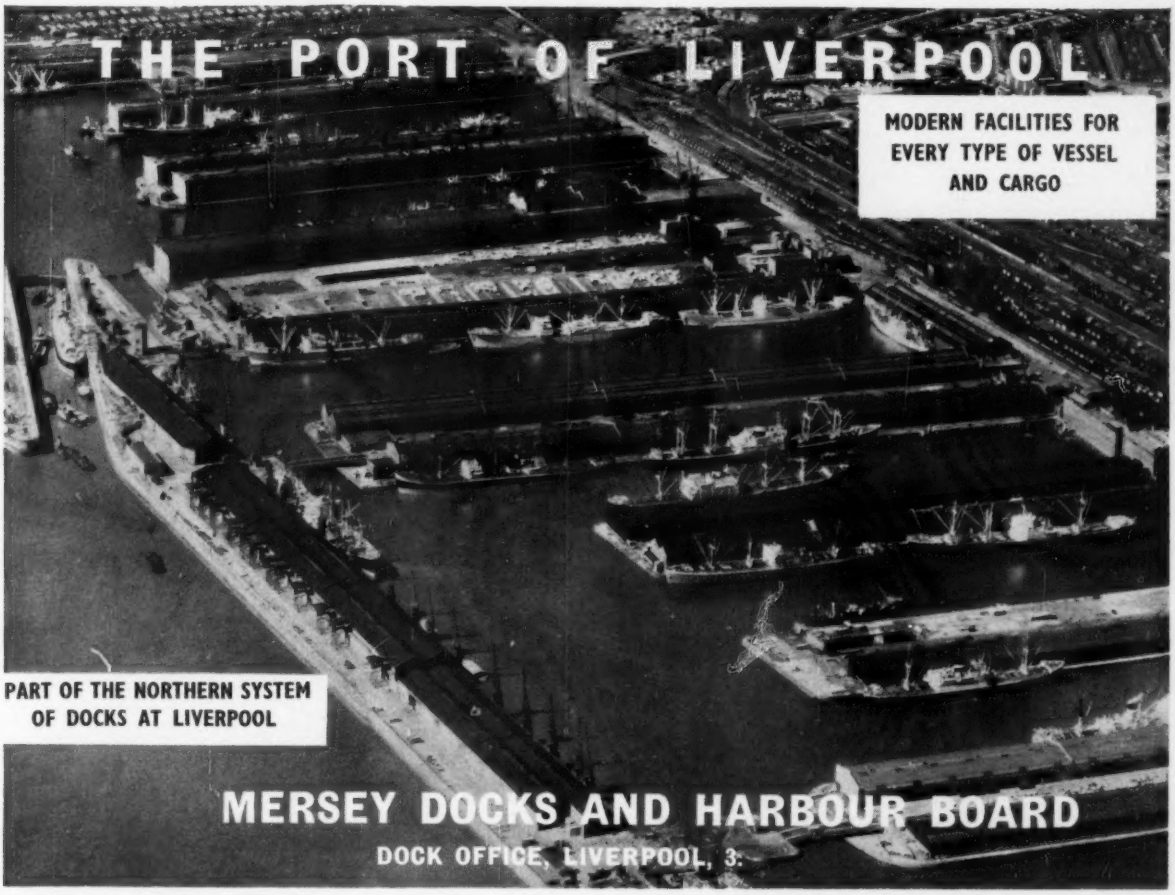
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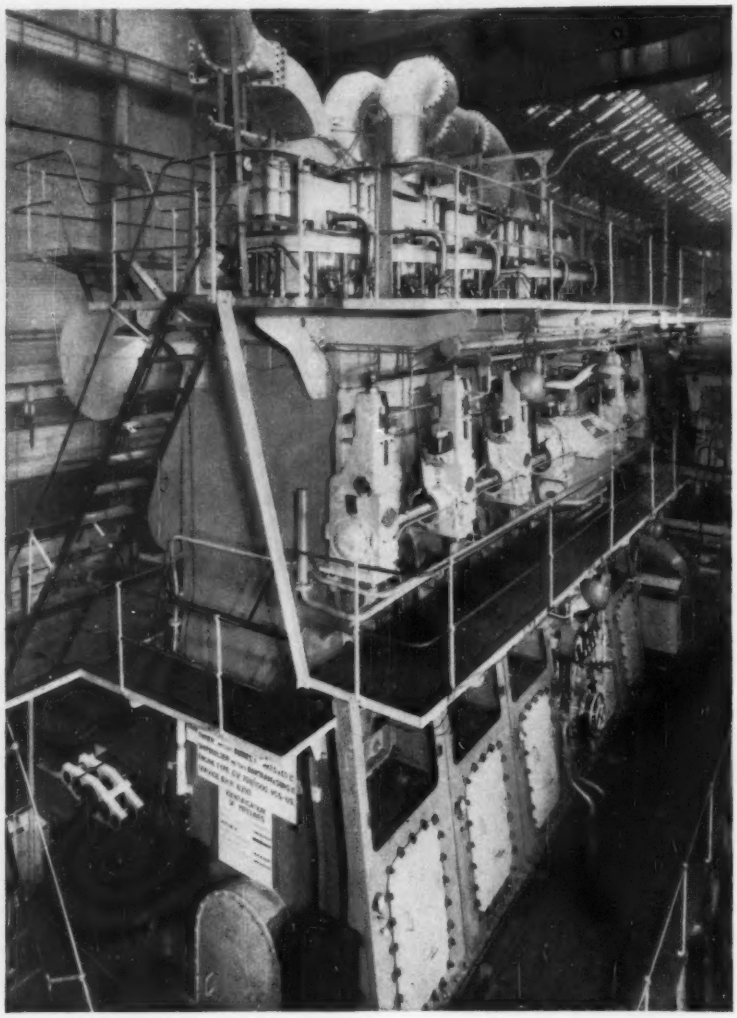

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